Dropout Prevention



Strategies for improving high school graduation rates

A Briefing Report prepared for the



CENTER FOR CHILD AND FAMILY POLICY DUKE UNIVERSITY

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Statement of Purpose and Focus

The purpose of the North Carolina Family Impact Seminar (NCFIS) is to provide objective, nonpartisan, solution-based research on a topic of current concern to state policymakers. The seminars purposefully address how policies and practices impact children and families. Legislators and legislative staff guide the topic selection each year, based on their own concerns and those of their colleagues and constituents, as well as their knowledge of what is likely to be addressed during that year's legislative session.

NCFIS includes annual seminars, briefing reports and follow-up activities designed specifically for state-level policymakers, including legislators and legislative staff, the governor and executive branch staff, and state agency representatives.

Through NCFIS, research, information and insight related to policy, practice and programs is presented in two ways:

- Via experts who speak at the seminar
- Via a topical briefing report

NCFIS also opens the door for ongoing exchanges between legislators; experts who speak at the seminars; researchers, faculty and staff of Duke University's Center for Child and Family Policy, which directs the state's seminars; and a broad range of stakeholders concerned about the issue, including members of the executive branch, directors of state and local government agencies, leaders of nonprofit agencies, and researchers and scholars from Duke University and other institutions of higher education. The briefing report is disseminated widely to this broad audience and is made available on the Center's Web site.

Family Impact

The majority of Americans say that their families are extremely important to them. Family Impact Seminars encourage policymakers to consider family impact in the same way that they routinely contemplate the economic and environmental impact of policies and practices.

The first step in developing family-friendly policies is to ask the right questions¹, such as:

- What can government and community institutions do to enhance the family's capacity to help itself and others?
- What effect does (or will) this policy (or program) have for families? Will it help or hurt, strengthen or weaken family life?

Family Impact Questions Regarding Dropout Prevention

Are there common characteristics of families whose children drop out OR of the schools that the students leave?

What is the impact of the growing dropout rate on North Carolina's families?

What dropout prevention programs work best for North Carolina's students and their families?

How would raising the compulsory school attendance age affect North Carolina students and their families?

These questions sound simple, but they can be difficult to answer.

Focus

The 2008 seminar focus, school dropout prevention, is a suitably targeted topic for several reasons:

- North Carolina high schools reported 23,550 dropout events among students in grades nine through 12 for 2005-2006; this is an increase of 6.2 percent over the previous year.² (See event dropout rate on page 14.)
- The number of dropout events for 2005-2006 is the highest reported since 1999-2000, when the number of dropout events was 23,597.³
- The 2005-2006 dropout rate of 5.24 percent is the highest reported since 2001-2002.⁴

- High school dropouts are more likely than high school graduates to be unemployed, to earn lower wages, to be on public assistance, to be single parents, to have children at younger ages and to be in prison.⁵
- In April 2008, the North Carolina General Assembly's Joint Legislative Commission on Dropout Prevention and High School Graduation submitted its interim report to the Joint Legislative Education Oversight Committee and to the 2008 Regular Session of the 2007 General Assembly. The final report is to be submitted before the opening of the 2009 Regular Session of the General Assembly. The Commission's report, pending legislation related to dropout prevention and several other legislative activities regarding the dropout challenge, make it clear that dropout prevention is a key concern of North Carolina policymakers.

¹ A Checklist for Assessing the Impact of Policies on Families*, developed for the Policy Institute for Family Impact Seminars: http://www.familyimpactseminars.org/fi_checklist_aipf.pdf>. *The Center for Child and Family Policy does not endorse this checklist, but offers it as a resource for policymakers.

² Report to the Joint Legislative Education Oversight Committee: 2006-2007 Annual report on dropout events and rates, G.S. 115C-12(27), prepared by the North Carolina Department of Public Instruction.

³ Ibid.

⁴Ibid.

⁵ High School Dropout: A quick stats fact sheet, National High School Center (September 2007).

Executive Summary

Dropout. The term immediately brings to mind an image, or a myriad of images. It conjures up a long list of adjectives—many of them negative.

We know who these kids are. Or do we?

For decades, we neglected the dropout issue because we lacked the definitions, the data and, possibly, the desire to come to grips with the enormity of the problem. The reason that the school dropout crisis is now referred to as a "silent epidemic" is because, when we weren't paying attention, the graduation rate in our country slipped to a level that threatens the very health and well-being of our society.

Each year, almost one-third of all public high school students—and nearly one-half of all blacks, Hispanics and American Indians—fail to graduate from public high school with their classes.¹

This briefing report to accompany the 2008 North Carolina Family Impact Seminar, "Dropout Prevention: Strategies for improving high school graduation rates," will help us come to grips with the problem by providing a wide range of information, including data and insights about how to address the problem.

In **Brief 1**, we pose tough questions that cut to the heart of what is most troubling about this crisis.

One reason

In **Brief 2**, we take a detailed look at the dropout problem in North Carolina.

In Brief 3, we explore what we mean by "high school dropout," and we

describe the many different rates and measurements used to quantify the problem.

In **Brief 4**, we share information about dropout prevention strategies.

Underlying all of these briefs is the belief that there is a path to graduation for every student, but not necessarily one path that is appropriate for all students.

Furthermore, research shows that there are particular milestones that all students must reach in order to be successful in school. And, we know that students are most at-risk for getting off-track when they are transitioning from one school to the next.

So, if we can figure out
who is dropping out,
why (for what reasons),
when (at what point in the student's career) and
where (from which schools),
we should be able to figure out how best to guide
each student on a path that leads to graduation.
This briefing report strives to take us further in that
direction.

We know who these kids are. They are our children—our future.

One reason that the high school dropout crisis is known as the "silent epidemic" is that the problem is frequently masked or minimized by inconsistent and opaque data reporting systems. For example, in some districts, a student who leaves school is counted as a dropout only if he or she registers as one. In others, a dropout's promise to get a GED at an unspecified future date is good enough to merit "graduate" status. With such loose definitions of what it means to graduate, it's no wonder this epidemic has been so silent!

-Margaret Spellings, U.S. Secretary of Education, April 1, 2008

¹The Silent Epidemic: Perspectives of high school dropouts. (March 2006).

Brief 1: Tough Questions for Policymakers to Consider in Addressing the Dropout Problem

By Thomas Ahn, Ph.D., Postdoctoral Research Associate, Center for Child and Family Policy

This brief presents several of the questions that policymakers should consider when addressing the dropout problem. While there are no right or wrong answers, it is useful to recognize how differing priorities may shape individual approaches to addressing the problem.

1. Why lower the dropout rate?

Why do we want to lower the dropout rate? Is making sure students graduate from high school the same thing as making sure those students are educated and productive citizens? If not, which is more important?

2. What is our primary goal?

Do we care about dropouts, diplomas, education levels or all three? Most countries whose education systems are said to be better than that of the United States require fewer years of schooling. Instead they concentrate resources to ensure students can read and do basic math by middle school and then offer students good vocational options instead of mandatory high school.

3. What is driving our concerns?

What aspect of the dropout problem do we really want to fix? Is it the sheer magnitude that bothers us, or are the racial, ethnic and class disparities our primary concern? The answer may have a significant impact on what we do. Would we be satisfied if the overall rate decreased but the disparities remained (or even increased)?

4. What is the impact of education policy?

How much does education policy really affect a

student's decision to drop out, as compared to parental, peer, societal and economic factors? Is it possible to devise legislation to effectively drive down the dropout rate? Might we do more for North Carolina by focusing on making sure every student can read and knows basic math facts by third grade?

5. What kinds of programs would we endorse?

- a. Would we support a program that increased the overall graduation rate by focusing resources on kids who are on the margin of dropping out and "giving up" on more problematic kids?
- b. If it were proven that providing "problem" kids with material incentives (such as \$50 a week, gift certificates for music or movies, etc.) prevented them from dropping out, would we endorse such a program?
- c. Suppose research showed that shifting resources away from extracurricular activities, art and music classes, or Advanced Placement classes to remedial reading and math classes either increased or decreased the dropout rate, would we endorse such a change in the education policy?

6. What are the consequences of raising the compulsory attendance age?

What would be the unintended consequences of inducing marginal students to stay in school to graduate or of raising the age at which students were allowed to leave school from 16 to 17 or 18? Might greater numbers of marginal students have a negative impact on higher performing students or on teacher retention? It is possible

that keeping more of these students in traditional school settings will sap time and effort of teachers who could otherwise engage in more productive activities with higher achieving students. Is that acceptable?

7. Are there acceptable alternatives to high school diplomas?

It could be that high school students in other countries do better than ours (and fewer drop out) because they only let "good" students go to regular high schools. Instead of trying to raise the graduation rate, might we be better off if we lowered the mandatory education age, became more selective about who we let into high school and created more opportunities for vocational training?

8. How much flexibility can we allow in practice?

What type of programs do we prefer? Accountability-type systems where we set clear educational goals and criteria and allow teachers and administrators to come up with strategies? Or do we want legislation that mandates specific strategies that are proven to have a positive result?

9. What are we willing to pay?

How much are we willing to pay for programs that reduce the dropout rate? Are we willing to raise taxes or take existing dollars from other kinds of programs? How much should we spend? Or do we believe it can be done within the current budget at no additional cost?

10. How do we define success?

What amount of dropout reduction would we consider a "success?" In North Carolina, only 68 percent of the students who entered ninth grade in 2002-2003 graduated four years later. What if, as the result of new legislation, the percentage increased to 75 percent? To 80 percent? To 90 percent? What would satisfy you? What would satisfy your constituents?

Brief 2: Assessing the North Carolina Dropout Challenge

By Casey Wyant, MPP, Research Assistant, 2008 Family Impact Seminar

Does North Carolina have a dropout crisis?

Different definitions and figures for dropout rates and graduation rates abound in the policymaking world (see Brief 3). Depending on what number we are looking at, school dropout may or may not seem like a crisis; however, too many students in the United States and in North Carolina are not graduating from high school. While certain figures might show the dropout problem to be minimal, it is important for us to consider these numbers in a wider context and not to take any individual figure at face value.

This brief provides an overview of the school dropout circumstances at play in North Carolina. Much of what holds in this state is true around the nation. State and local policymakers and practitioners, however, will benefit from as thorough an understanding as possible of the characteristics and conditions that contribute to North Carolina's dropout problem.

Graduation rates and dropout rates in North Carolina

Dropout Rates. North Carolina State Board of Education Policy (HSP-Q-001) defines a dropout as "any student who leaves school for any reason before graduation or completion of a program of studies without transferring to another elementary or secondary school."

For purposes of data reporting, the North Carolina Department of Public Instruction (NCDPI) breaks the definition down into smaller pieces. According to the "Dropout Data Collecting and Reporting Procedures" manual, a student is counted as a dropout if he/she meets the following criteria:

(1) student "was enrolled in school at some time during the reporting year;"

- (2) student "was not enrolled on day 20 of the current year;" and
- (3) student "has not graduated from high school or completed a state or district approved educational program and has not met any exclusions." 1,2

Students who meet these criteria are counted in a rate called the "event dropout rate."

Graduation Rates. In 2005, the averaged freshman graduation rate in North Carolina was 72.6 percent; nationwide, this rate for 2005 was 74.7 percent.³ This means that of 100,000 incoming ninth-graders in North Carolina in 2001, approximately 27,000 had not graduated at the end of four years. (Please see page 15 for further explanation of the averaged freshman graduation rate.)

In 2006, North Carolina began using a "fouryear cohort graduation rate." The change in the graduation rate formula came in response to No Child Left Behind. Prior to 2006, North Carolina was calculating its graduation rate as the percentage of each year's 12th-graders who graduated in four years or less, which yielded a much higher rate.

Using this new formula to get a cohort rate, the NCDPI found that, of the students who entered ninth grade in North Carolina in the 2002-2003 school year, 68.1 percent graduated in 2006.

The newly calculated four-year cohort graduation rate represents the emerging national consensus about how to look at the dropout issue. Researchers and policymakers agree that the event dropout rate alone may no longer suffice as a valid measure of how many students are leaving school. However, it is important to consider the event dropout rate and the cohort graduation rate in the context of one another.

• At 5.24 percent, the 2006-2007 event dropout

- rate was the highest that it has been since the 2001-2002 school year (5.25 percent).
- The event dropout rate increased by 6 percent from the 2004-2005 school year to the 2005-2006 school year.
- The event dropout rate increased by 4 percent from the 2005-2006 school year to the 2006-2007 school year.

Please see page 14 for further explanation of the event dropout rate.

There are several explanations for the discrepancy between the cohort graduation rate and the event dropout rate as Jay P. Greene explains in a 2002 report for the Manhattan Institute. First, district-and state-reported dropout rates often face self-reporting errors. These errors stem in part from the pressure on districts and individual schools to keep dropout rates low. As a result, they are more likely to assign a student whose whereabouts are

unknown into one of the exempt categories rather than to the dropout category. This results in a reported dropout rate that is lower than the true dropout rate.

Second, because dropout rates are reported as a one-year rate, they are often deceptively low. Students drop out of school in each of the years between the eighth and 12th grade, but the dropout rate only captures one year of this span. Greene explains, "It is like calculating a credit card interest rate as a monthly percentage instead of an annual percentage: The rate feels low, but in truth it compounds over a longer period of time." He and a growing number of researchers feel that the four-year cohort graduation rate is a much more accurate picture of who is actually graduating from high school than the event dropout rate.

The 2006 four-year cohort graduation rate also reveals

gaps in graduation rates between different groups of students. It is clear from the table below that minority and low-income students in North Carolina and across the United States are graduating at a lesser rate than their white or higher income peers. The table shows the graduation rates for the class of 2006 by demographic group.

Overview of North Carolina dropout policies and legislation

Both North Carolina and the federal government have passed numerous laws and associated policies that have implications for school dropout prevention. Some of the key statutes and policies in North Carolina are highlighted here.

The age of compulsory school attendance in North Carolina is set by Article 27 of N.C. General Statute 115c-378, which requires all students between the ages of 7 and 16 to attend school.

North Carolina Four-Year Cohort Graduation Rates, 2006

	Ninth-Graders in 2002-2003	Graduates in 2005-2006	Four-Year Cohort Graduation Rate	
All Students	103,441	70,484	68.1	
Male	51,754	33,045	63.9	
Female	51,687	37,439	72.4	
Native American	1,415	723	51.1	
Asian	2,065	1,530	74.1	
Black	30,261	18,155	60.0	
Hispanic	5,091	2,636	51.8	
Multiracial	1,410	920	65.2	
White	63,199	46,520	73.6	
Economically Disadvantaged	7,804	4,314	55.3	
Limited English Proficiency	1,022	558	54.6	
Students with Disabilities	9,310	4,645	49.9	
Source: North Carolina Department of Public Instruction				

North Carolina Legislation and Policies Related to School Dropout Prevention

Legislation/Policy	Description	Status
Session Law 2007-323 (House Bill 1473)	\$7 million appropriation for dropout prevention	Dropout prevention grant committee allocated funds in January 2008. Details page 11.
Session Law 2007-277 (Senate Bill 1030)	Requires the State Board of Education to develop a framework for a "Reaching One's Potential for Excellence" (ROPE) Scholars Program. This program is designed to strengthen education in middle school with long-term goals of reducing the high school dropout rate and increasing high school and college graduation rates.	State Board submitted report in October 2007. http://www.ncleg.net/documentsites/committees/JLEOC/Reports%20Received/2007%20Reports%20Received/Ropes%20Scholars%20Pilot%20Program.pdf
Session Law 2006-0176 (Senate Bill 571)	Requires the State Board of Education to report to the Joint Legislative Education Oversight Committee various information on school counselors and their roles in dropout prevention.	State Board submitted report in May 2007 and passed State Board Policy Q-PC-012 in June 2006, which delineates the appropriate roles of school counselors. http://dpi.state.nc.us/docs/studentsupport/counseling/report/sl06176scjob.pdf http://dpi.state.nc.us/docs/studentsupport/counseling/report2sl06176scjob.pdf
Session Law 2005-0271 (Senate Bill 408)	Requires the State Board of Education to identify research-based best practices and model programs to reduce the dropout rate and the number of suspended students, "especially in high-poverty schools with diverse student populations" and report findings to the Joint Legislative Education Oversight Committee.	State Board submitted report in 2006. <www.ncpublicschools.org 0512="" 0512_hsp09.pdf="" meetings="" sbe_=""></www.ncpublicschools.org>
Session Law 2002-178 (Senate Bill 1275)	Requires the State Board of Education to develop a plan to improve tracking of dropout data.	State Board increased the weight of dropout in the ABC growth formula, starting with the 2004-2005 school year. <www.ncpublicschools.org 0401="" 0401_hsp04.pdf="" sbe_meetings=""></www.ncpublicschools.org>
State Board Policy HSP- Q-001	Defines dropout and state policy regarding dropout prevention and students-at-risk.	State Board adopted the policy in 2004. http://sbepolicy.dpi.state.nc.us/

In addition to the statutory attendance requirements, there are other federal and state laws and state policies that address the dropout issue. The table on page 10 provides a brief description of recent state legislation and relevant policies.

In 2007, the North Carolina Legislature passed Session Law 2007-323, which created a one-time appropriation of \$7 million for programs and initiatives targeted at students who were at risk of dropping out. In January 2008, the funds were awarded in the form of Dropout Prevention Grants. Sixty entities across North Carolina received grants ranging from \$25,000 to \$150,000 that must be expended by Dec. 31, 2008. For a brief description of grant recipients and their programs, please see http://www.ncpublicschools.org/newsroom/news/2007-08/20080123-01.

Current efforts in dropout prevention in North Carolina

A wide range of dropout prevention efforts are under way in North Carolina. Many districts and schools employ multiple strategies for addressing the dropout challenge. Following are explanations of some of the strategies that the National Dropout Prevention Center/Network (NDPC/N) considers to be best practices and examples of these programs that are in place in North Carolina.

School-Community Collaboration

According the NDPC/N, "school-community collaboration occurs when groups or agencies come together to establish an educational community." These groups can include schools, homes, places of worship, community organizations and local businesses. Because schools do not exist in isolation, programs that strive for collaboration between school and community help to meet the nonacademic needs of students.

One national school-community collaboration program is Communities in Schools (CIS). CIS "bring[s] caring adults into the schools to address children's unmet needs [and] provides the link between educators and the community." CIS programs focus on making sure that students have

access to the "five basics":

- (1) a one-on-one relationship with a caring adult;
- (2) a safe place to grow and learn;
- (3) a healthy start and a healthy future;
- (4) a marketable skill to use upon graduation; and
- (5) a chance to give back to peers and community.⁴

Approximately 38 LEAs in North Carolina have a local CIS program. For a list of LEAs with CIS programs, please see http://www.cisnc.org/code/county/loccontact.htm.

North Carolina also has the Child and Family Support Team Initiative (CFST). The CFST initiative has placed 100 nurse-social worker teams (called CFST leaders) in 100 schools in 21 LEAs. The CFST leaders work to identify students at risk of failing and use child and family teams to connect those students to appropriate community services.

Early Interventions

Research shows that a potential high school dropout can be identified as early as the third grade. The education foundation that a child receives early in his or her schooling can have a significant impact on academic achievement in later years. Early Interventions are programs that are designed to ensure a high level of student engagement in the early years of schooling.

In North Carolina, there are several early childhood education programs to help prepare students for academic achievement early in their academic careers:

- Even Start Family Literacy. Even Start programs aim to break the cycle of poverty and illiteracy and improve educational opportunities of low-income families through "integrated early childhood education, adult literacy and parenting information." There are currently 14 Even Start programs in North Carolina. For more information, please see http://www.osr.nc.gov/EvenStart/indexFull.asp.
- More at Four. More at Four "is a high quality pre-kindergarten program that serves children who are at-risk and prepares them for success in school." More at Four programs are located in all

LEAs. For more information, please see http://www.osr.nc.gov/MoreFour/index.asp.

- Smart Start. Smart Start is a nationally recognized, statewide early childhood initiative in North Carolina designed to ensure that all children enter school ready to learn. Smart Start is funded by state and private funds and currently provides services in all 100 North Carolina counties. For more information, please see http://www.smartstart-nc.org/.
- Kindergarten Health Assessment. North Carolina has one of the most comprehensive health assessments in the United States. The Kindergarten Health Assessment identifies undiagnosed health or developmental needs. For more information, please see http://www.nchealthyschools.org/docs/home/kha0809.pdf>.

In addition to these four programs, low-income children in North Carolina also have access to Title I preschool and Head Start preschool programs.

Alternative Learning Opportunities

Many schools and districts are beginning to develop programs designed to engage students who are disconnected from the traditional high school model. These types of programs include early college high schools, content-specific high schools and smaller programs within regular schools to engage students who are at risk of dropping out.

- Learn and Earn. The statewide Learn and Earn initiative allows students to take college courses online and receive both high school and college credit for the course. For more information, please see http://nclearnandearn.gov>.
- Early College High Schools. There are many Early College High Schools across the state. These schools are typically collaborations between an LEA and a local college and are often located on a college campus. Students at Early College High Schools earn a high school diploma and an associate's degree or two years of credit toward a bachelor's degree during their four years of high school. Approximately 45 LEAs in North

Carolina have Early College High Schools.⁵

• Specialized Content Schools. Some districts are also beginning to develop schools that focus on a specific area, such as science or engineering. In these schools, the curriculum for all of the courses typically relates to the focus of the school. One example of this in North Carolina is the AHS Zoo School at Asheboro High School. The AHS Zoo School is "a science—themed, cross-curricular focused small learning community that actively engages students in real life experiences in our 1,500 acre campus [where] students have the opportunity to work with NC Zoo staff and apply their scientific investigation skills to solve problems."

High School Transition Programs

Research shows that students often struggle with the transition from middle school to high school. Several studies have found that students who perform poorly in the ninth grade are more likely to drop out of school even when controlling for individual student and school characteristics and previous academic performance. In North Carolina, approximately 15 percent of ninth-grade students do not earn enough credits to be promoted to the tenth grade each year.

To address this problem, many LEAs and schools have developed freshman transition programs to help students succeed in the ninth grade. These programs include freshman academies, "double dosing" of math and reading, and grouping teachers into interdisciplinary teams with the same groups of students.

Following are some of the LEAs that have a transition program in place at one or more of their high schools: Alamance-Burlington, Asheboro City, Caldwell, Columbus, Cumberland, Durham, Edgecombe, Gaston, Iredell-Statesville, Lenoir, Moore, New Hanover, Onslow, Stokes, Surry, Union, Wake and Weldon City.

For more about the challenge of transitions at all phases of students' school experiences, please see Brief 4, beginning on page 18.

Other dropout prevention efforts in North Carolina

In addition to the State Board of Education, NCDPI and the LEAs, many other national, state and local organizations are working toward solving the dropout crisis in North Carolina and beyond. The following list provides a sample of North Carolina organizations that have launched dropout prevention efforts or have held major conferences or meetings on the problem:

Communities in Schools North Carolina http://www.cisnc.org

James B. Hunt Jr. Institute for Educational Leadership and Policy http://www.hunt-institute.org/

John Locke Foundation http://www.johnlocke.org/>

The New Schools Project http://www.newschoolsproject.org

North Carolina Center for Public Policy Research http://www.nccppr.org>

North Carolina Chamber of Commerce http://www.ncchamber.net>

North Carolina Joint Legislative Commission on Dropout Prevention and High School Graduation http://www.ncga.state.nc.us/gascripts/Committees/Committees/Committee&sActionDetails=Non-Standing_6358>

North Carolina Justice Center http://www.ncjustice.org

North Carolina Rural Economic Development Center http://www.ncruralcenter.org

Public School Forum of North Carolina http://www.ncforum.org>

For the sake of students' futures—not to mention the future vitality of the state as a whole—North Carolina must address its dropout rate. High school graduation rates must be improved. While the challenge is great, it is encouraging that such a diverse array of committed organizations and individuals are working hard to address the dropout challenge. Brief 4 of this briefing report focuses on strategies and policies for dropout prevention.

¹ Exclusions: "transferred to another public school district, private school, home school or state/district approved education program;" "temporarily absent due to suspension or school approved illness;" "death."

² Public Schools of North Carolina. *Dropout Data Collecting and Reporting: Procedures 2007.*

³IES Education Digest. http://nces.ed.gov/programs/digest/d07/tables/dt07_102.asp?referrer=list.

⁴Communities In Schools. http://www.cisnet.org/>.

⁵The New Schools Project. http://wwwnewschoolsproject.org/current.html.

⁶ Asheboro High School. http://www.asheboro.k12.nc.us/cms/ahs+200+school/64.html.

Brief 3: What is a Dropout?

Kara Bonneau, MA, Associate Director of Data Management, North Carolina Education Research Data Center, Center for Child and Family Policy

The very definition of the term dropout is controversial. What makes a student a dropout and how to measure dropout rates vary from state to state and at the federal level. The lack of a standard definition and formula makes assessing school performance difficult and comparing schools and school systems almost impossible.

This brief provides a summary of the most commonly used definitions and measurements.

What is a dropout?

In *North Carolina*, a dropout is defined as "any student who leaves school for any reason before graduation or completion of a program of studies without transferring to another elementary or secondary school."

Dropout and completion rates

Cohort Dropout Rate: The number of dropouts from a single age group or specific grade (or cohort) of students over a period of time. *North Carolina* does not currently report a cohort dropout rate.

Event Dropout Rate: The number of students in a particular grade span dropping out in one year divided by a measure of the total students in that particular grade span.

This event rate, also known as the duplicate rate, does not count the number of students dropping out, but the number of occurrences of dropout. For example, if a student dropped out in more than one year, he/she would be reported as a dropout in each of the years.

Currently, *North Carolina* rates are calculated for grades one to 12, seven to 12 and nine to 12. The seven-to-12 dropout rate is the official dropout rate, since it is more inclusive of the students who were actually dropping out of school, and thus more

accurate than the nine-to-12 rate. In *North Carolina*, the grade nine-to-12 dropout event rate in 2006-2007 was 5.24 percent.

As defined *federally*, the event dropout rate estimates the percentage of both private and public high school students who left high school between the beginning of one school year and the beginning of the next without earning a high school diploma or its equivalent (e.g., a GED). It is used to track annual changes in the experiences of students in the U.S. school system.

Of note: the *federal* definition of the event dropout rate does not include those who complete a GED within the academic year as dropouts, whereas the *North Carolina* rate counts those leaving to complete a GED as dropouts in its event dropout rate. Similar variations in definition occur from state to state.

Status Dropout Rate: A cumulative rate much higher than the event rate. The status dropout rate denotes the proportion of all individuals in the population who have not completed high school and were not enrolled at a given point in time.

The *federally* defined status dropout rate reports the percentage of individuals in a given age range (typically 16 to 24) who are not in school and have not earned a high school diploma or equivalency credential, irrespective of when they dropped out. The rate focuses on an overall age group as opposed to individuals, so it can be used to study general population issues.

Cohort Graduation Rate (as currently defined in *North Carolina*): The percentage of ninth-graders who graduate from high school four years later. This rate does not reflect students who may take five years to graduate from high school. In future years, the North Carolina Department of Public Instruction hopes to be able to show a five-year graduation rate, as well as the four-year cohort rate. In *North*

Carolina, 68 percent of students entering grade nine in 2002-2003 graduated in 2006-2007 or earlier. Note that this rate does not account for students graduating in more than four years or those who drop out of school prior to grade nine.

The *federal* rate (also referred to as the averaged freshman graduation rate) focuses on public high school students as opposed to all high school students or the general population. It is designed to provide an estimate of on-time graduation from high school. Thus, it provides a measure of the extent to which public high schools are graduating students within the expected period of four years.

No Child Left Behind On-Time Graduation

Rate (used in *North Carolina* prior to 2006): Of the students who graduated with a regular diploma, this rate reflects the percentage who graduated in four years or less. This measurement is misleading because it does not reflect all ninth-graders who entered high school four years earlier; it is limited to those completing a regular diploma and does not include dropouts in its calculation.

National Center for Education Statistics Leaver (Completer) Rate: The number of graduates divided by an estimated cohort constructed by adding the sum of graduates plus other completers and cumulative dropouts for the previous four years. In calculating this rate, most states only count regular diploma recipients. This formula does not measure the percentage of ninth-graders graduating within four years, as it includes all graduates in a given year, regardless of whether they have taken four or more years to complete high school. The formula also uses graduate and cumulative dropout counts, not actual enrollment counts, to estimate the ninthgrade class four years earlier. This estimate is more comprehensive than a cohort rate because it includes students graduating in more than four years, but it is only an estimate of the actual cohort size.

Status Completion Rate: The status completion rate indicates the percentage of individuals in a given age range who are not in high school and who have earned a high school diploma or equivalency credential (GED), irrespective of when the credential was earned. The age range used in federal reporting is 18 to 24. The measurement can be used to study

general population issues. *North Carolina* does not currently report a status completion rate.

Some states report status completion rates following the federal definition, and others use variations of this definition (i.e., the percentage of persons up to age 21 who have completed high school or a GED).

North Carolina guidelines

1991-1992: The Department of Public Instruction implemented federal guidelines for reporting dropouts: this meant that each event of dropping out was to be counted. As noted above, if a student dropped out in more than one year, he/she would be reported as a dropout in each of the years, so this came to be called the "duplicated count." The state continued to count the unduplicated dropouts as well, so there were two reported rates: the state (unduplicated) and the federal (duplicated).

1998-1999: Students who left school prior to graduating and enrolled in a community college program must be counted as dropouts.

2000-2001: Dropout rates for grades nine to 12 were included in the ABCs (North Carolina's accountability system) as a measure of high school growth/gain. Since then, this rate has become a component of the growth model for all high schools.

2005-2006: North Carolina reported a four-year cohort graduation rate for the first time; this change was in response to the No Child Left Behind legislation.

Current guidelines:

- A dropout is a student who was enrolled at some time during the previous school year but who was not enrolled (and who does not meet reporting exclusions) on day 20 of the current school year.
- A single individual may be counted as a dropout more than once if he/she drops out of school in multiple years.
- No student who drops out is counted more than once each year. (If he/she drops out twice in the same school year, he/she is not counted twice.)

- Dropout events do not include students below the compulsory school age or students in prekindergarten or kindergarten.
- Schools that cannot document a former student's enrollment in a U.S. school must report that student as a dropout.
- Reporting exclusions include:
 - Students who are known to have left the country;
 - Students who are serving suspensions;
 - Students who are expelled (expelled students are counted as dropouts for federal but not state reporting);
 - Students who transfer to a private school, home school or a state-approved educational program; and
 - Students who are not enrolled on day 20 because they have serious illnesses.

- Students reported as dropouts NOT included in the dropout rate:
 - Students who leave school within 20 days of their first enrollment in a particular LEA ("initial enrollees");
 - Students incarcerated in an adult facility¹; and
 - Students who fail to return to school after a long-term suspension.¹
- Students in other special circumstances who ARE included in the dropout rate:
 - Students who leave the public schools to attend community colleges; and
 - Students who leave school to obtain a GED.

For more information on North Carolina dropout reporting, please see:

- http://www.ncpublicschools.org/research/dropout/reports/,
- http://www.ncpublicschools.org/docs/research/dropout/reports/2007dropoutmanual.pdf, and
- http://www.ncpublicschools.org/research/dropout/faq/.

For more information on federally defined rates from the National Center for Education Statistics, please see: http://nces.ed.gov/pubs2007/dropout05/>.

¹ Incarcerated students and those who fail to return to school after a long-term suspension are not included in the dropout rate as calculated for accountability purposes but are identified as dropouts for other reporting purposes.

North Carolina Dropout Rate Figured Using Varied Measurements

Rate	Statistic ¹ (%)	Description	GED status
Federal Event dropout rate	3.8	Percentage of high school students who have dropped out of grades 10–12 in the past year	Students who get an equivalency certificate do NOT count as dropouts.
North Carolina 9-12 Event Dropout Rate	4.74	Percentage of high school students who have dropped out of grades 9–12 in the past year	Students who get an equivalency certificate ARE dropouts.
North Carolina 7-12 Event Dropout Rate	3.23	Percentage of high school students who have dropped out of grades 7–12 in the past year	Students who get an equivalency certificate ARE dropouts.
Federal Status Dropout Rate	9.4	Percentage of people ages 16 to 24 who are not enrolled in high school and who do not have a high school credential	Students who get an equivalency certificate do NOT count as dropouts.
Federal Cohort Graduation Rate (averaged freshman graduation rate)	75.0	Percentage of public high school students who graduate with a regular diploma four years after starting 9th grade	High school equivalency credentials are NOT counted as "graduation."
North Carolina Cohort Graduation Rate	68.4 ²	Percentage of public high school students who graduate with a regular diploma four years after starting 9th grade	High school equivalency credentials are NOT counted as "graduation."
Federal Status Completion Rate	87.6	Percentage of young adults ages 18 to 24 who have left high school and who hold a high school credential	People who have earned an equivalency credential count as completers.

¹2005 rates (most recent available from federal data sources).

Federal rates and definitions: http://nces.ed.gov/pubs2007/dropout05/tables/table_A3.asp.

²2006 N.C. Cohort Graduation Rate (first year available).

Brief 4: State-Level Dropout Prevention Programs, Strategies and Policies

By Joel Rosch, Ph.D., Senior Research Scientist and Policy Liaison, Center for Child and Family Policy; and Jenni Owen, MPA, Director of Policy Initiatives and Associate Director, Center for Child and Family Policy

Why we care about dropouts

Almost one-third of North Carolina's public school students fail to graduate from high school after four years. For the poor and members of racial and ethnic minority groups, the proportions are even higher. In the past, skilled, unskilled and vocational jobs in industries such as manufacturing and textiles provided employment and upward mobility for young adults without a high school diploma. Having a high school diploma was not essential to make a decent living. Dropping out of school did not necessarily constitute a family or community crisis. Today, dropping out of high school is much more likely to lead to unemployment and persistent poverty.

For an individual, the impact of dropping out may be tragic, but when a near-majority of young people from an entire community fails to graduate, the tragedy is even more pronounced. People without diplomas not only earn less and, therefore, pay fewer taxes, but they also consume more public services, have less stable families, commit more crime and live shorter lives.² The dropout crisis increases costs for whole communities, robs entire communities of resources and may deprive them of effective leaders.

There is no one-size-fits-all solution to address the dropout problem; multiple strategies can increase the likelihood that students will complete high school. Some of these strategies require state-level action; others must be implemented locally, within individual schools and school districts. Still others involve working with students and families on an

individual basis. While none of the strategies is easy, quick or cost-free, identifying and implementing effective strategies is worthwhile. Increasing the graduation rate contributes to improving economic vitality, cutting the crime rate, reducing social welfare costs, expanding the middle class, reducing concentrated poverty and achieving social justice.³

Key to any strategy aimed at achieving higher graduation rates is gaining a better understanding of the dropout problem in our state and in each of our communities. We not only need to know who the dropouts are and why they drop out, but also understand that this will vary across our state and vary among schools within a single district. The more policymakers know about who drops out and why, the easier it will be to identify the most promising strategies for reducing dropout rates.⁴

This brief summarizes much of what we know about how to reduce dropout rates and increase graduation rates. The recommendations are based on what is known from a number of sources about the nature of the dropout crisis and how it can be addressed. While all communities have a dropout problem, each community's problem is somewhat different. To make the most progress, therefore, the guidance offered here should be integrated with the particular facts, characteristics and overall context of each community. This brief is not intended to be comprehensive; however, we hope it provides an overview of strategies to address the dropout problem.

Promising strategies for ending the dropout crisis

STRATEGY 1

Understand the dropout crisis in your community

Who drops out?

Education leaders should strive to answer several key questions prior to taking any action to address the dropout problem:

- How many students drop out?
- How far from graduation are they when they drop out (what percentage of dropouts are relatively close to graduation—within a year or so—and what percentage are still in need of three to four years of secondary schooling)?
- From which schools do they drop out?

Those who leave during or before the ninth grade require different strategies than working with late dropouts, who drop out well into their junior or senior years. We cannot provide differentiated interventions unless we know more about who is dropping out. To get a clear picture of the dropout problem requires data that permits tracking of students over time to determine which students entering ninth grade go on to graduate within four or five years.

Policymakers and practitioners can address these questions at either the state or the local level.

Ideally the state would invest the funding and human resources necessary to provide local school districts with enough information to retrospectively trace cohorts of students as they progress through school, from the sixth grade to graduation or dropping out. According to the Data Quality Campaign sponsored by the Alliance for Excellence in Education, Florida, Utah and Arkansas make this kind of information available to every local school district. The Data Quality Campaign identifies 10 types of information that are essential to do this kind of planning. While it is working to improve its data systems, today the North Carolina Department of Public Instruction (NCDPI) can provide some, but not all, of this kind of information. (For how North

Carolina compares to other states, see: http://www.dataqualitycampaign.org/survey_results/state.cfm?st=North%20Carolinanational>.)

Having such data helps in several ways:

- Gives the community a firm understanding of how many students who start school graduate, and how far students are from graduation when they drop out;
- Allows communities to identify when and where students get off-track;
- Shows what factors predict who will drop out in different communities; and
- Provides a baseline from which to judge the impact of reforms.

Where the state cannot provide data, local leaders can begin gathering some of their own information. While state leaders are developing systems to capture this kind of information, communities can simultaneously take advantage of existing state data and national data to compare their schools to those in other districts.⁷

Local school officials also can begin by examining a sample of school transcripts from students who have stopped attending high school in the current year to estimate how far they are from graduation and to get an idea about why students in their schools are leaving. Some school systems have used this approach to develop "on-track" and "off-track" indicators.8 Some systems have developed ways to follow groups of students forward from sixth grade by looking at attendance patterns, behavioral history (suspensions, etc.), course grades and test scores of a sample of students who graduate and a sample of those who drop out. These kinds of estimates should be more than sufficient to get a picture of the dropout problem in a school or in a community that can be used to guide effective dropout prevention and intervention strategies. There are free, userfriendly models that explain how local school systems can develop their own early indicator systems.9

Building this kind of system for local communities could be an excellent use of one-time funding from either the legislature or from state and local

foundations and other philanthropic entities. Experience from other communities shows that this kind of analysis requires only modest investments in time and dollars, but can bring large dividends. This is also an area in which colleges and universities could help local communities.

Why do students drop out?

Because students drop out for a number of different reasons, it is also important to understand why students drop out in different communities. Researchers at Johns Hopkins identified four main reasons why students drop out.¹⁰ Each of these reasons requires a different response with regard to both prevention and intervention.

- Life Events—students who drop out because of something that happens outside of school: they become pregnant, get arrested or have to go to work to support members of their family.
- 2) Fade Outs—students who have generally been promoted on time from grade to grade and may even have above-grade-level skills, but at some point become frustrated or bored and stop coming to school. Once they reach the legal dropout age, they leave, convinced that they can find their way without a high school diploma or that a GED will serve them just as well.
- 3) **Push Outs**—There are parents and advocates who believe that some students, especially students who are (or are perceived to be) difficult, dangerous or detrimental to the success of the school, are subtly (or not so subtly) encouraged to withdraw from the school, transfer to another school or are simply dropped from the rolls if they fail too many courses or miss too many days of school and are past (or in some cases not even past) the legal dropout age. While this may be based on anecdotes, if this perception is widespread, mobilizing community support will be difficult.
- 4) **Failing to Succeed**—students who fail to succeed in school and attend schools that fail to provide them with the environment and supports they need to succeed. For some, initial failure is the result of poor academic preparation; for others, it is rooted in unmet social-emotional

needs. Few students drop out after their initial experiences with school failure. In fact, most persist for years, only dropping out after they fall so far behind that success seems impossible or they are worn down by repeated failure.

In order to act, communities also need to know how much of their dropout problem is driven by each type of dropout.

While the popular viewpoint is that "life events," "fade outs" and "push outs" predominate, most evidence points to "failing to succeed" as the main source of dropouts. Giving an accurate picture to the community is important. Through poor attendance, acting out and/or course failure, these "failing to succeed" students are the easiest to find.

Each community needs a clear picture of its dropouts. This does not have to cost a great deal of money. For instance, in Chatham County, N.C., community leaders used a small planning grant to find out more about dropouts in their community by interviewing a sample of students getting GEDs about why they dropped out of school.

Another strategy is to look at chronic truants. There is good reason to believe that last year's truant is this year's dropout. Researchers have found that asking students to report the number of school days they miss for various reasons can provide insight into why they later drop out. When surveys are anonymous, students usually do not hesitate to provide answers even when they do not cast themselves in the best light. The survey results can then be used for follow-up interviews with a subset of students to delve more deeply into motives for dropping out. Local policies can be tailored to address those reasons.

Local officials can start by using information from other districts and then adjust as specific community details emerge. Work across a number of cities has shown that the majority of dropouts can be identified based on data readily available in, and commonly collected by, schools and school districts. Research in Philadelphia and replicated in three other districts shows that about half of eventual dropouts can be identified by the end of sixth grade, and close to 75 percent by the start of high school.¹²

Much of this kind of information ideally would come from the state. This is what local leaders need before they can thoroughly address their local dropout problems.

From what kinds of schools do students drop out?

Much can be learned from identifying where dropouts "happen" within a district. A relatively small number of high schools produce a large percentage of the dropouts. Again, there are national sources that identify high schools with the highest dropout rates. Local school systems can then see which middle schools feed those high schools. Districts can look at three issues at the schools where large numbers of students are dropping out:

- The needs of the students who attend these schools.
- The kinds of teachers and other educational resources the students encounter.
- The climate in the schools the students attend.

Student characteristics and needs

Nobody should be surprised that schools with a concentration of disadvantaged students have a harder task and need additional or, at a minimum, different kinds of resources. For example, high schools with high dropout rates usually have a large percentage of students who are repeating ninth grade for the second or third time, are old for grade, are in special education, are two or more years below grade level in mathematics and reading, or have missed a month or more of eighth grade.

Students at the middle schools that feed these high schools usually have attendance problems, behavior problems, and are failing either math or English. These are not the students that typical schools were designed to educate. Typical high school students are the appropriate age for their grade, come to school regularly, are not in special education classes, and have math and reading skills at or near grade level. With this data in hand, the legislature and/or a school district can determine which schools are most in need of extra resources.

Teachers and other school resources

These schools often do not have the appropriate teachers for the most challenged students. Experience in ninth grade is often the best predictor of whether or not a student will finish high school. Ninth grade, however, is often viewed as the least desirable teaching assignment in a high school, meaning those students may not end up with the more experienced and often more skilled teachers. In some schools, ninth grade is often taught by a shifting constellation of new, inexperienced, emergency-certified teachers and long-term substitutes. High-poverty middle schools are also often viewed as an undesirable teaching assignment, with teachers leaving for either elementary or high schools at the first opportunity. As The Education Trust's Funding Gaps 2006 report shows, these imbalances in experienced and skilled teachers lead to both poor academic outcomes and funding inequities across schools within districts.14

If we are going to address the dropout issue, we need to systematically examine who is teaching the ninth grade in the high schools with the highest dropout rates and who is teaching in the middle schools that feed them. We need to know the experience and skill levels of the teachers we place in the most difficult jobs. Ideally, we also need to calculate the actual dollars being spent on instruction and student support in our most challenged schools.

School climate

School climate can be examined by looking at staff turnover, student and staff behavior, and staff attitudes.

High schools with high dropout rates and the middle schools that feed them are often marked by high rates of teacher and administrator turnover and absences. This has multiple negative consequences. It is difficult to have meaningful and lasting reform if the teachers and administrators who must carry it out are constantly shifting.

High staff turnover also means that students are taught by higher numbers of inexperienced teachers, provisionally certified teachers and long-term substitutes. When many teachers are frequently absent, other adults in the building must cover their classes and, in so doing, have less time and energy to do their jobs or lead reform efforts.

Communities looking at teacher and administrator turnover rates and absences should see whether schools have a chaotic school climate, with students milling in the halls long after the bell has rung and all the classroom doors shut tight. This can be analyzed by talking to teachers, administrators and students, or by observation.

Looking at attitudes is more subtle. If the teachers say that the administration does not back them up when students act out; if administrators say teachers are not doing their jobs with classroom management; if students say they find some teachers caring, but others capricious and unfair, then you have likely found a school where teacher-administrator and teacher-student relationships have broken down. Everyone is blaming someone else, and the collaboration and trust that are essential to successful school reform are nonexistent (or only exist among a small beleaguered group of teachers/administrators). This creates a feeling that all teachers must fend for themselves. It leads some to conclude that the only thing they can do is leave as soon as possible and/or take off as many days as they can to make it through the year. Observations and simple surveys can identify schools with climates that are not conducive to learning.

Communities should carefully examine their high schools with high dropout rates and the middle schools that feed them. Has the community organized its public education system in such a way that a subset of its secondary schools face an almost overwhelming level of educational challenges with inadequate resources? Has it provided these schools with fewer resources when teacher quality and the actual educational dollars spent at each secondary school are examined? Is it allowing these schools to continue year after year with dysfunctional school climates that lead to high rates of teacher and administrator turnover and absences? Learning the answers to these questions is an important step in solving the dropout challenge.

STRATEGY 2

Data-driven prevention, intervention and recovery efforts at the key points where students fall off the path to graduation

Having the information described in Strategy 1 will be of greatest value if it is used to drive policy and practice. After learning about the students and schools most closely associated with dropouts, policymakers can direct resources where they can be used most effectively.

Taking advantage of key transitions

Transition points in the prekindergarten-through-12th grade education process often provide opportunities for prevention, intervention, or both. If students successfully transition into each level of schooling (elementary, middle and high), they are more likely to graduate from high school. However, such transition points also present opportunities for students to fall behind. Evidence shows that focused efforts and effective reforms at each of these transition points can make a positive difference and increase graduation rates.

None of this is easy. Often the students who fall behind at these transitions have multiple needs that require cooperation between schools and community agencies.

At each key transition point, schools and their community partners need to ensure that all students have the academic/cognitive skills, social-emotional supports and behavioral expectations they need to succeed in each level of schooling. This is because most students who drop out do so for a combination of academic and social-emotional reasons. The best instruction can only realize its potential positive impact if students attend school consistently; are encouraged by family and/or peers to succeed; and learn to behave appropriately.

Transition #1: Entering elementary school

The primary goal during the transition into elementary school is to ensure that all students have a successful start. There are two parts: acquiring the cognitive (prereading and premath) skills and knowledge that will let them successfully learn in school, and acquiring the norms and behaviors of schooling.

A typical U.S. classroom scenario consists of one adult responsible for instructing 20 to 30 students. This arrangement assumes that students are prepared to succeed in this type of learning situation. Many of the students who are not prepared to succeed in elementary school quickly fall behind and ultimately drop out. Students who do not have the cognitive skills or knowledge to understand and successfully integrate the lesson a teacher is giving or do not know how to behave according to the expectations of the classroom will not learn at the expected rate. They will become frustrated and will likely frustrate the adults in the school. This, in turn, will lead to a number of often counter-productive responses, including teacher outbursts or students being held back or placed in special education classes. Or, as stated above, the students will quickly fall behind and, ultimately, drop out.

The importance of a successful start is well recognized. What is too often overlooked, however, is that a successful start involves instilling in students that learning is a joyful experience and that schools can be a place of joy. If students' first experiences with schooling are that school is a place of tension, rules and constraint, but not joy, they will view it as something to be endured, not cherished. This may be difficult because many of the parents of the most challenged students may not have had joyful experiences in school either. Furthermore, a teacher who is a master at instilling the joy of learning may not have the opportunity with kids who start way behind. Expanding prekindergarten education programs like More at Four to get children ready for school is one strategy. There is strong evidence that lowering class size in kindergarten and first grade is also an effective way to improve academic outcomes.15

Focus on making every student a successful early reader

Many say that nothing is more essential to success in school than the ability to read. Communities must ensure that everything possible is done to ensure that all students are reading at appropriate levels

by second grade. 16 High quality prekindergarten programs can ensure that even disadvantaged students enter school with the prereading and premath skills necessary to begin learning. There are quick ways to identify students in kindergarten who do not have these skills, and interventions exist that have been shown to work. The key is identifying students with deficits, then matching the right interventions to those deficits. The research indicates that schools should establish a series of reading benchmarks for each student and develop a tiered response system of increasingly intensive instruction that is put in place when students do not meet the benchmarks. The intervention should continue until the student is able to meet the benchmark. The NCDPI has resources to help school systems implement these programs; but not all schools take advantage of these resources.¹⁷

Some children will need one-on-one instruction to learn how to read. These upfront costs will be repaid through fewer grade retentions and special education placements, which end up being far more expensive than one-on-one instruction.¹⁸ One strategy is to develop family literacy programs in which parents are taught how to play an active role in developing their children's reading skills. An advantage to this is that a struggling early reader may have younger siblings who can benefit as well.¹⁹

Do not forget mathematics

Reading is important, but so are early math skills. Some research indicates that early math skills may be a better predictor of future academic success than early reading skills.²⁰ Because much of young children's free play has a mathematical component, nearly all children, including children from highpoverty neighborhoods, enter kindergarten with the basic building blocks of mathematics. Mathematics is an area where nearly all students can experience early academic success. This can serve as an area of success for students who may be struggling to learn how to read. Providing early academic success for children should be an important part of any dropout prevention strategy. According to Johns Hopkins researchers, the National Science Foundation has helped develop a number of good early mathematics programs.

Socialize students into the norms of schooling

For students who live in chaotic environments, school can be an antidote to the high levels of uncertainty and stress in their lives. Many will need to be successfully socialized into the expected norms of activity and behavior in schools—everything from raising hands, to taking turns, to working quietly. They have to see that these rules help make schools a place where they can feel secure.

Often this means that the early years of schooling need to be full of active learning—group projects and experiences that enable students to experience success and develop a joy of learning, as well as provide them with important content knowledge about the world. Evidence-based interventions like the Good Behavior Game have been shown to create the conditions that help students successfully learn the behavioral norms of schooling.²¹ Schools in North Carolina that can successfully implement Positive Behavioral Support programs and other evidence-based interventions of whole school reforms have better results. Unfortunately, it is not enough to buy a new program or announce an initiative. It is critical to ensure that the programs are adopted and implemented well.²²

Do not expel primary students

This may seem far-fetched but it appears to be a growing phenomenon.²³ Giving up on a 5-, 6- or 7-year-old child is not a productive solution for anyone. Expelling primary school students should be viewed as total system failure. Additional skilled adults should be assigned to the classrooms where this is occurring to provide both the students and the teachers the supports they need to succeed.

Do not overuse special education

Special education should never be the first option for students who are not succeeding behaviorally or academically. Research suggests that the response to academic or behavioral problems should be intervention. However, for this to work schools need professional staff who can help teachers match student needs to appropriate interventions. Special education should only be used for students with clear needs that can only be addressed through its

supports, not as a first response to failure at regular education. New federal guidelines encourage schools to use special education funds to build this kind of system. States that have implemented this kind of system have better outcomes and fewer special education referrals.²⁴

Look for students who are falling behind

Some states have strategies to systematically focus resources on students who are failing grades. Through end-of-grade testing, monitoring report cards or checking attendance, school leaders know which students are headed for academic failure. Successful schools contact parents at the first sign of problems. Whether it be mandating reduced class size, individual instruction or requiring summer school, school systems need policies that target resources to failing students. For instance, Charlotte-Mecklenburg Schools has truancy courts that hold parents accountable when their students miss too many school days. Different school systems use a variety of programs, including tutors, summer school, small classes, and so on, to help students who are falling behind.

Transition #2: The middle grades

This is perhaps the most perilous transition. Students who make unsuccessful transitions to the middle grades, as evidenced by poor and declining attendance, behavior problems and/or course failure in the sixth grade, rarely graduate. For every 100 sixth-graders who fail math or English, only 11 percent graduated from the school system on time.²⁵

Middle school brings with it a constellation of forces that actively work to disengage students from schooling. The middle grade transition is particularly difficult for students in high-poverty neighborhoods who are experiencing multiple changes in their lives at a time when they are deciding whether or not to be engaged with schooling. The cognitive demands of schooling are becoming more complex at the same time that students are more likely to encounter violence on the way to and from school, to become targets of crime or to be actively recruited into gangs or criminal enterprises. Finally, they may attend a school that has an overwhelming concentration of students in need and a high turnover of teachers and,

as a result, is chaotic and disorganized. A number of researchers identify middle school as the time when many students become lost.

On the instructional side, middle schools must provide an effective bridge to high school-level skills. The middle grades curriculum must build each year to measurable and intellectually meaningful outcomes in the eighth grade—the ability to write a persuasive essay and research paper, to read and interpret original historical documents, to conduct a science experiment and analyze its results and to use data analysis to uncover or solve a problem. These are the tasks that both engage middle school students and demonstrate they are ready for success in high school. This instructional focus must be paired with a communal organization of schooling that enables students to develop and maintain real bonds with their teachers. There are a range of techniques that can be used to achieve this, such as:

- Interdisciplinary teacher teams;
- teacher pairs, in which each educator teaches two subjects to the same students;
- Looping, in which teachers travel with students from grade to grade; and
- Small learning communities.

The National Association of Secondary School Principals has a guide to effective middle grade reforms. ²⁶ The key is to create an organization of schooling where teachers can focus their efforts on a manageable number of students and spend sufficient time with them for true bonds to develop. There is evidence that a communal organization of schooling, combined with strong instructional programs and effective extra help in the middle grades, can increase graduation rates by 10 percentage points. ²⁷ This, however, may not be enough. There are at least three other reforms or interventions that may be necessary.

A multitiered public health model prevention, intervention and recovery system

Middle grade schools work best when they use a public health model with universal, indicated and targeted supports for students.²⁸ To accomplish this:

First, there must be universal schoolwide strategies designed to prevent poor attendance,

behavior problems and course failure. Schools need to monitor every absence. Good behavior must be modeled and rewarded; poor behavior must be dealt with quickly and fairly with transparent processes. When implemented successfully, programs like Positive Behavioral Support promote this kind of positive school climate, which appears to lower rates of disruptive behavior and increase academic achievement.

Second, there are students who will need more focused or indicated intervention. These could be extra classes in core subjects in place of electives, mentoring, conflict management or grief counseling group sessions, or even brief, daily attendance check-ins by an adult. Some schools partner with agencies like Communities In Schools (CIS) to help with school-based supports.

Third, there are usually a small number of students who do not respond to school-based interventions. These students will need more targeted, intensive interventions, such as wraparound services offered by community agencies. This can include tutoring, counseling and various kinds of therapy. To provide these kinds of services effectively, schools need close working relationships with social service and mental health agencies.

This last group of students can be destructive to their classmates, their schools, themselves and their communities. While there is a temptation to remove them from school, they do not disappear. Because what happens in the community often impacts what happens in schools, suspending these students to the streets is likely to continue to have a negative impact on their schools and former schoolmates.

With this last group of students, communities are far better off using one of a growing number of evidence-based interventions for adolescents that have proven cost effective for use with these students. For these students, schools often need systematic ways to engage other kinds of social service agencies. North Carolina's Child and Family Support Team Initiative is an example of this kind of program. A number of North Carolina counties have systematic programs to link students with severe behavior problems with community-based services.²⁹

Schools also need clear rules on what triggers movement from one level of support to the next and determines when students are ready to move back to less intensive supports. There are often benefits to partnering with external organizations, which can help organize the integrated services students may need in the targeted and intensive support levels.

Engage the whole community in getting middle school students to attend every day

In high-poverty neighborhoods, the drop-off in attendance between elementary and middle school can be staggering. In some of these neighborhoods, half or more of the middle school students are missing at least a month of school, double or even triple the rate for elementary students. It may take more than just the school system to get 11-, 12- and 13-year-olds to school. In some communities where students take public transportation to school, it may involve redesigning bus routes. There are numerous ways to engage communities. For instance, in Pueblo, Colo., local businesses have made informal rules excluding school-age children from stores or malls during regular school hours. In Charleston, S.C., law enforcement personnel actively look for and question school-age children during school hours.

In some communities, faith-based groups and other community organizations work to improve child care so that 12-year-olds do not have to watch younger siblings while parents go to work. In some systems, school personnel call students every day they are absent, within 30 minutes of the start of school, to see what help they need getting to school. This could involve artful use of technology, linking teachers with laptops to parents with cell phones allowing teachers—with a click of the mouse—to send instant alerts to parents when students do not show up for school or leave early.

Truancy is the first step to dropping out; schools cannot address this issue alone. It is a good place to involve national service organizations like CIS, AmeriCorps and City Year, which can help provide the necessary human resources.³⁰

Transition #3: High School

The Consortium on Chicago School Research has shown that if students do not earn ontime promotion to the 10th grade, their odds of graduating greatly diminish. For many of these students, moreover, failure in ninth grade happens very quickly. If students miss 10 or more of the first 30 days of school because they feel that not much is going on and no one reacts to their absences, they have a good chance of failing and having to repeat ninth grade. Schools must monitor these students, just as they need to monitor attendance in middle school. Some students may attempt to repeat the ninth grade, but, minus additional supports, their probability of graduating is significantly reduced. If we can get these students to 10th grade with the appropriate number of credits, their chances of graduating go up significantly.³¹

If students miss 10 or more of the first 30 days of school because they feel that not much is going on and no one reacts to their absences, they have a good chance of failing and having to repeat ninth grade.

Transform the high schools where dropping out is common or even the norm into strong learning institutions

Any school where the number of freshmen is nearly twice as large as the number of graduates has a dropout crisis. To turn this around, communities must ensure that their high schools that face high degrees of educational challenge combine evidence-based comprehensive school reforms with the human resources necessary to implement and sustain these reforms. A great deal has been written about how to transform America's high schools. The National Association of Secondary School Principals, the Gates Foundation and MDRC all have examples of strategies to improve high schools. Some of these strategies have been developed for North Carolina.

Based on most of this research, if the focus is on low-performing students who reach high school, reforms must accomplish three key objectives in order to improve high schools with low graduation rates:

1. Ensure that all students earn on-time promotion to the 10th grade.

While social promotion is often counterproductive, repeating ninth grade is often a one-way ticket to dropping out. Earning on-time promotion to 10th grade is the equivalent of being able to read by second grade, in terms of reducing the risk of dropout. It is a point when everything possible needs to be done to ensure successful promotion. In practical terms, this means many students will need a double dose of mathematics and reading instruction in the ninth grade (80-90 minutes a day for the entire year). Some students will need targeted extra help, which will involve reduced class size and extra tutors. For some, this still might not be enough, and summer school or intensive courses early the following year will be needed to get them to full 10th-grade status as rapidly as possible. In short, this is the point when relentless support is needed. In systems that have effective targeted interventions in the earlier grades, it is hoped that the number of students who need this kind of support will be low. In some systems, it will be high. This is the time to identify and target those most likely to drop out.

2. Recognize that there are both academic and socialemotional components to course failure and low scores on assessments.

Students fail in high school mostly because they lack the necessary academic skills and knowledge to succeed. However, those who have studied dropouts claim that students also fail because they are afraid of failing and would rather be able to say they failed because they did not try hard than admit that they tried and still failed. Students who continue to fail despite the provision of extra help may need classes as small as 10 students so that teachers are able to learn and understand their circumstances and the factors that stand in the way of success.

3. Make high school relevant to adulthood; teach adult behaviors.

Just as the early elementary grades need to make learning a pleasant experience, and the middle grades

need to be designed to fulfill early adolescents' desire for adventure and camaraderie, the early years of high school need to be focused on building a bridge to adulthood. Many students in high-poverty areas are compelled to grow up fast and assume adult responsibilities at an early age. They are not, however, given the time or supports to learn adult outlooks and behaviors, like working for future goals and knowing what needs to be done to realize them. High school curriculum planners must actively structure electives and the themes of core courses to stress how the lesson is relevant to adult success. Vocational Education and Career Academies can often accomplish this, as can thematic academies that stress the arts, science or public service. Critical to success is that students make an informed choice that lets them align their studies with their interests.35

Involving Parents

Surveys indicate that students routinely say they work hardest for their parents. But this is also the age when it is hardest for parents to know how their students are doing and to stay involved with their children. One strategy is for high schools to have mandatory parent-student-teacher report card and future planning conferences twice a year to celebrate successes, identify challenges and design solutions. Just as important, current school successes or struggles need to be continually linked to future outcomes and combined with postsecondary planning beginning in the ninth grade. Technology via conference calling should be used to accommodate parents' work schedules. The National Network of Partnership Schools highlights a number of promising approaches for increasing parental involvement at the high school level.³⁶

STRATEGY 3 Building multiple pathways to adult success

Keeping students on the path to graduation through the transitions to elementary, middle and high school is not always possible. Despite best efforts, some students will fall off-track. Any of these reforms will take time and none will work for all students. Students will also transfer in from other systems. To effectively lower the dropout rate, school systems need to provide multiple pathways to a diploma.

First, schools need effective recovery options for students who, despite all of the supports provided or because of a life event, made a decision to drop out. These students need a way to get back on the path to graduation. Some systems have developed a second chance to graduate. For students who recently dropped out and/or were close to graduation, this may be possible in a regular school setting.

Students who are two or three years behind their age cohort, however, are unlikely to return to a setting filled with younger students and may need to attend high school at night or, at least, in an alternative setting. Indiana allows community colleges to offer high school diplomas. In some systems, alternative schools are not solely for discipline problems; rather they are for students who cannot realistically continue their education within a regular population of students.

Students are more likely to stay in school or try to come back after dropping out if the diploma they receive is meaningful and provides a clear path to either a job or postsecondary schooling. Traditional vocational education may no longer be appropriate. High schools need to build direct linkages for students to these options through high-quality career and technical education (CTE) programs. Emerging evidence suggests that the same underlying academic skills that are needed for success in college are also needed for success in today's workplace. While career advancement may require a college degree, there are many rewarding and productive occupations where entry requires only two years of postsecondary schooling or training. In some professions, those who complete their four-year degrees while working actually outperform those who have already earned their degrees when they start.

High schools also need to find new strategies to collaborate with community colleges to increase the number of ways students can achieve adult success. The early college movement allows students to earn credits toward a high school diploma and an associate's degree at the same time. North Carolina Central University offers a joint program with Durham Public Schools, and the number of

early college programs is growing across North Carolina. States could consider allowing both types of institutions to receive reimbursement for the same students, creating incentives for this kind of program through raising the amount of funding received. These schools provide the option to graduate with an associate's degree ready to work or to transfer to a four-year college.

Other Strategies

1. Raise the compulsory school attendance age

There is some evidence that raising the compulsory school attendance age can lower the dropout rate. States that have raised the age have seen a decrease in dropouts.³⁷ While there is some controversy with this approach, these programs are more likely to curtail the number of late dropouts than to reduce the number of early dropouts.

2. Increase rigor

Though it may seem counterintuitive, there is some evidence that increasing academic rigor can lower the dropout rate. According to the Gates Foundation, school systems that offer more challenging math courses in the early grades and more Advanced Placement courses in high school have reduced their dropout rates.³⁸

3. Build a communitywide campaign: Schools cannot do this alone

In communities where dropping out is common, the school systems will not be able to address the problem on their own. The necessary community response must have several components, including:

A communitywide compact to end the dropout crisis

One reason why the dropout crisis persists is that often no one is ultimately the steward of the necessary reforms. Communities need a strategic plan formulated at the community level, supported by schools and other permanent institutions of the community—its businesses, institutions of higher learning, civic groups, etc. These are, in short,

the civic enterprises that will bear the costs of the dropout problem. The Pew Partners for Change and the "Silent Epidemic" Web sites provide resources on how to organize a communitywide compact to end the dropout crisis.³⁹

Correcting the dollar flow between education and social services

There is clear evidence that reducing dropouts will lower social services costs and that more effective social services can improve school performance. Yet, currently, the relationship between educational and social services funding at the local, state and national level is not organized to take advantage of this. Local communities must work at the state and federal level to make sure that they can blend or braid funds between education and social service agencies. Better collaboration can get more funds flowing toward dropout prevention work. A number of efforts are under way in North Carolina to build these relationships.⁴⁰

4. Increase coordination among all parts of the education system

A number of states, including North Carolina, have established committees that bring together people from the various levels of education, ranging from preschool to college and beyond (years 16 to 20).⁴¹ Some states include representatives from other state agencies, businesses and the nonprofit sector. The goal is to develop a seamless continuum that prepares students for life, work and further study. Under the definition used by the Education Commission of the States, there are now 40 such councils nationwide. Some are more comprehensive and have more authority than others.⁴²

5. Invest in human resources

For evidence-based interventions to succeed, they need to be well implemented. Every major new intervention, whether it is at the district or school

level, needs someone to keep the implementers engaged and on task, to troubleshoot and customize the intervention to local circumstances, and to continuously look to improve the policy or program. In theory, this is supposed to be the school principal, but school principals have many other duties. Too often, education reform focuses mostly on teachers and principals. But our most challenged students also need help from counselors, social workers, nurses and school psychologists, especially if we expect schools to adopt targeted programs. This is also a place where community resources can help.

Businesses and local institutions, as part of the community compact, could provide employees with nine-month leaves to serve as implementation managers for key reforms (and perhaps the state and federal governments could provide tax incentives to help defray the cost). This would provide schools with access to a larger pool of individuals with good management skills and provide the community with first-hand knowledge of how schools work and the challenges they face.

This can be done

The dropout crisis in North Carolina can be stopped. The vast majority of dropouts do not want to leave high school without a diploma, and even those who think they do quickly regret it. The challenge is not so much to convince students to stay in school, but to provide the continuous support they need to succeed in school and to give those who leave a way to return to school. This can be accomplished by first developing a deep understanding of the nature of the dropout crisis in your community. The next step is to focus community efforts on building a comprehensive dropout prevention, intervention and recovery system targeted at the key points when students fall off the path to graduation. Finally, the community must commit itself to a sustained campaign to end its dropout crisis and gather the financial and human resources it will need to succeed.

This document draws heavily on the work of Robert Balfanz and his colleagues at the Center for Social Organization of Schools (CSOS) at Johns Hopkins University. Dr. Balfanz gave us permission to borrow liberally from his report, *What Your Community Can Do To End Its Dropout Crisis*, and related research at CSOS. That report and related reports used in this document can be found online at http://web.jhu.edu/CSOS/graduation-gap/gradgap.html. What is presented is our interpretation of his analysis and other analyses. It reflects the views of the authors, not Dr. Balfanz or Duke University.

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See also the Data Quality Campaign. http://www.dataqualitycampaign.org/.

- ⁵ Ibid.
- ⁶ The Data Quality Campaign. http://www.dataqualitycampaign.org/.
- ⁷ Alliance for Excellent Education. *High schools in the United States: How does your local high school measure up?* http://www.all4ed.org/promotingpower.
- ⁸ Project U-Turn. http://www.projectuturn.net>.
- ⁹ Jerald, C.D. (2006). http://www.jff.org/Documents/IdentifyingPotentialDropouts.pdf>.
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- ¹⁵ McRobbie, J., Finn, J.D. & Harmon, P. (1998). *Class size reduction: Lessons learned from experience.* San Francisco: WestEd. http://www.wested.org/policy/pubs/full_text/pb_ft_csr23.htm.

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Appendices

- I. Relevant Education Acronyms
- II. Glossary of Relevant Education Terms
- III. Organizations Addressing Dropout Issues
- IV. Publications List
- V. Table: Compulsory School Attendance Laws, by State
- VI. Table: North Carolina Dropout Event Rates, by LEA

Relevant Education Acronyms

ABCs

Accountability, Basic Skills and Localized Control

ACT

American College Test

ADA

Average Daily Attendance

ADM

Average Daily Membership

AP

Advanced Placement

ALP

Alternative Learning Placement

AYP

Adequate Yearly Progress

CCF

Common Core of Data

CECAS

Comprehensive Exceptional Children Accountability System

CINS

Child in Need of Services

CSOS

Center for Social Organization of Schools

DPI

Department of Public Instruction

DPP

Dropout Prevention Program

ECS

Education Commission of the States

ELL

English Language Learner

EOC

End-of-Course Test

EOG

End-of-Grade Test

ESEA

Elementary and Secondary Education Act

ESL

English as a Second Language

ETS

Educational Testing Service

FAPE

Free Appropriate Public Education

FIS

Family Impact Seminar

FRL

Free and Reduced Priced Lunch

GED

General Education Development (most common)

General Education Diploma General Equivalency Diploma

GPA

Grade Point Average

IDEA

Individuals with Disabilities in Education Act

IEP

Individualized Education Plan

IES

Institute of Education Sciences

IPT

IDEA Proficiency Test See IDEA, above.

LEA

Local Education Agency

LEP

Limited English Proficient/Proficiency

NBER

National Bureau of Economic Research

NCCLAS

North Carolina Checklist of Academic Standards

NCDPI

North Carolina Department of Public Instruction

NC GS

North Carolina General Statute

NCERDC

North Carolina Education Research Data Center

NCES

National Center for Education Statistics

NCHSCT

North Carolina High School Comprehensive Tests of Reading and Mathematics for Grade 10

NCLB

No Child Left Behind

NCSL

National Conference of State Legislatures

NC WISE

North Carolina Window of Information for Student Education

NDPC/N

National Dropout Prevention Center/Network

PBS

Positive Behavioral Support

PEP

Personalized Education Plan

PSAT

Pre-Scholastic Assessment Test

RtI

Response to Intervention Response to Instruction

SAS

Student Accountability Standards

SAT

Scholastic Assessment Test

SBE

State Board of Education

SEA

State Education Agency

SES

Socioeconomic Status

SCOS/SCS

North Carolina Standard Course of Study

SIMS

Student Information Management System

SIP

School Improvement Plan

TIMS

Transportation Information Management System

WWC

What Works Clearinghouse

Additional acronym resources:

U.S. Department of Education, Principal Office Functional Statements:

http://www.ed.gov/about/offices/list/om/fs_po/acronyms.html.

U.S. Department of Education, FY 2007

Performance and Accountability Report: http://www.ed.gov/about/reports/annual/2007report/glossary.pdf>.

Public Schools of North Carolina: English version: http://www.ncpublicschools.org/acronyms/; Spanish version: http://www.ncpublicschools.org/acronyms/spanish.

Glossary of Relevant Education Terms

This document includes definitions of frequently used education terms related to dropout prevention. It has been developed for the 2008 Family Impact Seminar and is not comprehensive.

ABCs

The ABCs of Public Education is North Carolina's comprehensive plan to improve public schools. The plan is based on three goals: 1) strong accountability, "A," 2) mastery of basic skills, "B," and 3) localized control, "C." The ABCs was implemented in 1996-1997.

Advanced Placement (AP)

The Advanced Placement (AP) program is an academic assessment program owned and conducted by the Educational Testing Service (ETS), the organization that administers the College Boards. The program includes a demanding academic course of study in college-level subjects such as physics, biology, calculus and foreign languages, among others. A student who performs above a specified level on the assessment may be awarded college credit for certain courses upon entry to a postsecondary institution.

After-school programs

Center- or school-based programs regularly scheduled at least once each month during after-school hours. See Center- or school-based programs.

Age of compulsory attendance

Age until which minors are legally mandated to attend school. North Carolina and 26 other states require school attendance until age 16. Eight states require attendance until age 17, and 16 states require school attendance until age 18. (See Table on page 56.)

Alternative learning program (ALP)

Term used in North Carolina to refer to various kinds of alternative learning environments. North Carolina law requires that every school system in the state have at least one alternative learning program. However, each school

district can define the target or targets for that program. ALPs serve different populations in different school systems. One county may target high school students, while another may target elementary school students. See: http://www.ncpublicschools.org/alp/.

Alternative schools

Most states have alternative schools to serve students whose needs cannot be met in a regular education, special education or vocational school. They can take various forms, but generally provide nontraditional education and may serve as an adjunct to a regular school. Although these schools fall outside the categories of regular, special education and vocational education, they may provide similar services or curriculum. Some examples of alternative schools are schools for children with severe disabilities, schools for older students who want to complete their education in the evening, education provided in residential treatment centers for substance abuse, schools for chronic truants and schools for students with behavioral problems. About 6 percent of schools in the North Carolina Common Core of Data files are alternative schools. See Common Core of Data.

At-risk

In the context of dropping out of school, being "at-risk" means a student has one or more factors that have been found to predict a high rate of school failure at some time in the future. This "failure" generally refers to dropping out of high school before graduating, but also can mean being retained within a grade from one year to the next. The risk factors include extreme poverty, having a parent who never finished high school, living in foster care and living in a household where the primary language spoken is not English.

Average Daily Attendance (ADA)

Attendance is the presence of a student on days when school is in session. A student is counted as present only when he/she is actually at school, present at another activity sponsored by the school as part of the school's program, or personally supervised by a member of the staff. The total number of days of attendance for all students divided by the total number of school days in a given period gives the average daily attendance (ADA). Used with Average Daily Membership (ADM), this can provide information on the percentage of enrolled students who are present in school each day.

Average Daily Membership (ADM)

The total number of school days within a given term—usually a school month or school year—that a student's name is on the current roll of a class, regardless of his/her being present or absent, is the "number of days in membership" for that student. The sum of the "number of days in membership" for all students divided by the number of school days in the term yields ADM. The final average daily membership is the total days in membership for all students over the school year divided by the number of days school was in session. Average daily membership is a more accurate count of the number of students in school than enrollment.

Center- or school-based programs

A care arrangement that encompasses supervised and organized activities in a nonresidential setting, such as the child's school or a community center.

Charter school

A publicly funded school that, in accordance with a state enabling statute, has been granted a charter exempting it from selected state or local rules and regulations. A charter school may be a newly created school or it may previously have been a public or private school. In return for funding and autonomy, the charter school must meet accountability standards. A school's charter is reviewed (determined by state statute; typically every three to five years) and can be revoked for a range of reasons, such as guidelines on curriculum and management not being followed

or standards not being met. See Public school and School district.

Cohort dropout rate

The number of dropouts from a single age group or specific grade (or cohort) of students over a period of time. North Carolina does not currently report a cohort dropout rate. (See page 14 for additional information.)

Cohort graduation rate (as currently defined in North Carolina)

The percentage of ninth-graders who graduate from high school four years later. This rate does not account for students graduating in more than four years or those who drop out of school prior to grade nine. The federal rate (also referred to as the averaged freshman graduation rate) focuses on public high school students, as opposed to all high school students or the general population, and is designed to provide an estimate of ontime graduation from high school. Thus, it provides a measure of the extent to which public high schools are graduating students within the expected period of four years.

Common Core of Data

The Common Core of Data (CCD) is an annual collection of public elementary and secondary education data that is administered by the National Center for Education Statistics (NCES) and its data collection agent, the U.S. Census Bureau. See http://nces.ed.gov/ccd/>.

Completion rate (high school)

The high school completion rate represents the proportion of 18- to 24-year-olds who have left high school and earned a high school diploma or the equivalent, including a General Education Development credential.

Core Curriculum

A course of study that is deemed central and usually made mandatory for all students of a school or school system. Core curricula are often instituted, at the primary and secondary levels, by school boards, departments of education or other administrative agencies charged with overseeing education.

Core New Basics Curriculum

First recommended by the National Commission on Excellence in Education in "A Nation at Risk" (1983), it includes four years of English, three years of mathematics, three years of science and three years of social studies. See: http://nces.ed.gov/programs/quarterly/Vol_3/3_3/q4-1.asp.

Drop out (verb)

The event of leaving school before graduating. Transferring from a public school to a private school, for example, is not regarded as a dropout event.

Dropout (noun)

An individual who is not in school and who is not a graduate. A person who drops out of school may later return and graduate, but is called a "dropout" at the time he/she left school. At the time the person returns to school, he/she is called a "stopout." Measures to describe these often complicated behaviors include the event dropout rate (or the closely related school persistence rate), the status dropout rate and the high school completion rate. (Please see Brief 3 for an in-depth definition of Dropout.)

Dropout factories

Term popularized in the media from a report by Johns Hopkins researcher Dr. Robert Balfanz. Refers to a high school where the number of graduating seniors is less than 60 percent of the number of students who start as freshmen. That description fits more than one in 10 high schools across the United States. A number of North Carolina high schools fit this definition. See: http://www.csos.jhu.edu/crespar/techReports/Report70.pdf>.

Dropout prevention programs

Interventions designed to increase high school completion rates. These interventions can include techniques such as the use of incentives, counseling or monitoring as the prevention/intervention of choice.

Educational attainment

The highest level of schooling that a student attends and completes.

Elementary and Secondary Education Act

A U.S. federal statute enacted April 11, 1965, that funds primary and secondary education and mandates professional development, instructional materials, resources to support educational programs and parental involvement promotion. The Act was originally authorized through 1970; however, Congress has reauthorized the Act every five years since its enactment. This act contains 'Title One,' which distributes funding to schools and school districts with a high percentage of students from low-income families.

End Of Course (EOC) test

North Carolina end-of-course, subjectspecific tests administered in some courses and corresponding to grades nine through 12.

End Of Grade (EOG) test

North Carolina end-of-grade reading and math tests administered in grades three through eight.

English Language Learner (ELL)

English language learners are students whose first language is not English and who need language assistance to participate fully in the regular curriculum. ELL students, also called Limited English Proficient (LEP) students, are one of the 10 NCLB-defined student groups.

Enrollment

The total number of students registered in a given school unit at a given time, generally calculated in the fall.

Event dropout rate

A dropout event, as defined by North Carolina school systems, occurs when an individual who was enrolled in school at some time during the previous academic year is not enrolled on day 20 of the current year, and has not transferred to another school, graduated from high school or completed a state- or district-approved educational program.

Exit examination

A number of states have a test or series of tests that students must pass in order to graduate from high school. The examination and all of its components vary among states.

Extracurricular activities

Activities in organized settings that students may engage in on weekdays outside of school hours that are not part of a formal before- or after-school program. Such activities may include organized sports, debate or science clubs, music lessons, scouts or religious activities. If the child's parent reports that the extracurricular activity was undertaken at least in part to cover a period after school when the child needed adult supervision, then the activity is considered to be "nonparental care." Otherwise, the extracurricular activity is undertaken only because of the personal interest or enrichment of the child.

Free lunch eligibles

See National School Lunch Program.

GED recipient

A person who has obtained certification of high school equivalency by meeting state requirements and passing an approved exam, which is intended to provide an appraisal of the person's achievement or performance in the broad subject matter areas usually required for high school graduation.

General Education Development (GED) credential

General Education Development (most common) General Education Diploma General Equivalency Diploma

A comprehensive test used primarily to appraise the educational development of students who have not completed their formal high school education and who may earn a high school equivalency certificate through achieving satisfactory scores. The test is developed and distributed by the GED Testing Service of the American Council on Education. In North Carolina, it is administered by the N.C. Community College System.

Grade Point Average (GPA)

A student's cumulative high school or undergraduate grade point average (GPA) standardized to a 4.00-point scale.

Guidance staff

Staff whose primary responsibility is to provide academic, career or personal/social counseling to students.

High school completion

An individual has completed high school if he/she has been awarded a high school diploma; in some states, an equivalent credential, such as the General Education Development (GED), counts.

High school completion rate

Indicates the percentage of all persons ages 21 and 22 who have completed high school by receiving a high school diploma or equivalency certificate.

High school diploma

A formal document regulated by each state certifying the successful completion of a prescribed secondary school program of studies. In some states or school districts, high school diplomas are differentiated by type, such as an academic diploma, a general diploma or a vocational diploma.

High school dropout rate

Event, status and cohort dropout rates each provide a different perspective on the student dropout population. (See definitions for each of these terms elsewhere in this glossary and in Brief 3.)

High school equivalency certificate

A formal document certifying that an individual has met the state requirements for high school graduation equivalency by obtaining satisfactory scores on an approved examination and meeting other performance requirements (if any) set by a state education agency or other appropriate body. See General Education Development (GED) credential.

Kindergarten

Includes transitional kindergarten, kindergarten and pre-first grade students.

Language minority students

Students for whom English is not their primary home language.

Limited English Proficient

See English Language Learners.

Local Education Agency (LEA)

See School district.

Longitudinal dropout rate

The longitudinal dropout rate is the percentage of students in a nationally representative cohort of students selected at a particular grade level at a certain point in the school year who have left school and not graduated with a diploma or certificate of graduation as of a certain later time. One example of a longitudinal dropout rate is the percentage of high school freshmen enrolled in spring 2002 who dropped out two years later as of spring 2004. (See also Dropout and Status dropout rate.)

Middle school

A separately organized and administered school between the elementary and senior high schools. When called a "junior high school," a middle school usually includes grades seven, eight and nine (in a 6-3-3 plan) or grades seven and eight (in a 6-2-4 plan). In most N.C. school districts, middle school spans grades six to eight.

National Center for Education Statistics Leaver (Completer) Rate

The number of graduates divided by an estimated cohort constructed by adding the sum of graduates plus other completers and cumulative dropouts for the previous four years. In calculating this rate, most states only count regular diploma recipients. This formula does not measure the percentage of ninth-graders graduating within four years, as it includes all graduates in a given year, regardless of whether they have taken four or more years to complete high school. The formula also uses graduate and cumulative dropout counts, not actual enrollment counts, to estimate the ninth-grade class four years earlier. This estimate is more comprehensive than a cohort rate because it includes students graduating in more than four years, but it is only an estimate of the actual cohort size.

National School Lunch Program

Established by President Truman in 1946, this is a federally assisted meal program operated in public and private nonprofit schools and residential child care centers. To be eligible, a student must be from a household with an income at or below 185 percent of the poverty level for reduced-price lunch or at or below 130 percent of the poverty level for free lunch.

New Basics curriculum

A minimum curriculum recommended by the National Commission of Excellence in Education (NCEE) in 1983. Recommendation: four years of English; three years each of mathematics, science and social studies, and one-half year of computer science. College-bound high school students also are advised to complete two years of foreign language. (See also Core curriculum and Core New Basics curriculum.)

No Child Left Behind (NCLB) Act of 2001

A federal law that reauthorized a number of federal programs aiming to improve the performance of U.S. primary and secondary schools by increasing the standards of accountability for states, school districts and schools, as well as providing parents more flexibility in choosing which schools their children will attend. This law requires states to recruit and maintain "highly qualified" teachers. The progress of all public school students is measured annually for math and reading in grades three through eight and at least once during high school. By the end of the 2007-2008 school year, testing also will be conducted in science once during grades three through five, six through nine, and 10 through 11.

No Child Left Behind On-Time Graduation Rate

Of the students who graduate with a regular diploma, this rate reflects the percentage who graduate in four years or less. This measurement is misleading because it does not reflect all ninth-graders who entered high school four years earlier; it is limited to those completing a regular diploma and does not include dropouts in its calculation. (Used in North Carolina prior to 2006.)

Nontraditional student

A public school student with any of the following characteristics: is old for grade, attends school part time, works full time while enrolled, has dependents or is a single parent.

Preschool

A program enrolling children younger than 5 years of age and organized to provide educational experiences under professionally qualified teachers prior to entry into elementary school.

Public school

A public institution that provides educational services. The age ranges are defined by state law, but may start as early as age 3 and, for certain populations, last as long as the early 20s. Public schools include regular, special education, vocational/technical, alternative and public charter schools. They also include schools in juvenile detention centers, schools located on military bases and operated by the United States Department of Defense, and the federal Bureau of Indian Affairs-funded schools operated by local public school districts. Federal and state statutes generally require that all U.S. residents are entitled to an opportunity for a free and appropriate public education.

Reading literacy

Understanding, using and reflecting on written texts in order to achieve one's goals, to develop one's knowledge and potential, and to participate in society.

Remedial education

Instruction for a student lacking the reading, writing, mathematics or other skills appropriate for his/her age and/or grade level.

Retention

Repeating an academic year of school. Students are retained in grade if they are judged not to have the academic or social skills to advance to the next grade. Retention is also known as "grade retention," "being held back" or "repeating a grade."

School district

An education agency at the local level that exists

primarily to operate public schools or to contract for public school services. Synonyms are "local basic administrative unit" and "local education agency (LEA)." In North Carolina, charter schools are considered to be separate local education agencies.

School lunch program

See National School Lunch Program.

School year

The 12-month period of time denoting the beginning and ending dates for school accounting purposes, usually from July 1 through June 30.

Social promotion

The practice of promoting students to the next grade, despite low achievement.

Socioeconomic Status (SES)

A measure of an individual's or family's economic and social ranking relative to other families. For students, SES typically takes into account the father's education level, mother's education level, father's occupation, mother's occupation and family income.

Status completion rate

The percentage of individuals in a given age range who are not in high school and who have earned a high school diploma or equivalency credential (GED), irrespective of when the credential was earned. The age range used in federal reporting is 18 to 24. The measurement can be used to study general population issues. North Carolina does not currently report a status completion rate. Some states report status completion rates following the federal definition; others use variations of this definition (i.e., the percentage of persons up to age 21 who have completed high school or a GED).

Status dropout rate

A cumulative rate much higher than the event rate, the status dropout rate denotes the proportion of all individuals in the population who have not completed high school and were not enrolled in high school at a given point in time. Status rates are higher than event rates

because they include all dropouts in a given age range, regardless of when they last attended school. Since status rates reveal the extent of the dropout problem in the population, these rates also can be used to estimate the need for further education and training designed to help dropouts participate fully in the economy and life of the nation. (See also Dropout and Longitudinal dropout rate.)

Teacher certification

License granted by states for teachers to teach a given subject. In 2002, all states required a bachelor's degree that included subject matter as well as pedagogical studies; all but 10 states required basic skills tests in reading, mathematics or general knowledge; and 31 states required subject-matter examinations.

Title I grant program

The federal government provides Title I grants to local education agencies (LEAs) to supplement state and local education funding based primarily on the number of children from low-income families in each LEA. The program provides extra academic support and learning opportunities to help disadvantaged students catch up with their classmates or make significant academic progress.

Total expenditures for elementary and secondary education

All expenditures for regular school programs, including transportation, staff compensation, interest on school debt, capital costs, etc.

Total expenditures per pupil in average daily attendance

Includes all expenditures allocable to per-pupil costs divided by average daily attendance. These allocable expenditures include current expenditures for regular school programs, interest on school debt and capital outlay. Since 1980–1981, expenditures for state administration have been excluded and expenditures for other programs (summer schools, community colleges and private schools) have been included.

Total per-pupil expenditures

Total expenditures divided by fall enrollment.

Vocational education

Organized educational activities that offer a sequence of courses that provides individuals with the academic and technical knowledge and skills needed to prepare for further education and for careers requiring less than a bachelor's degree. At the high school level, vocational education consists of occupational education, general labor market preparation, and family and consumer sciences education.

Vocational schools

Vocational schools primarily serve students who are being trained for semi-skilled or technical occupations. The schools may be part of a regular district (along with academic schools) or in a vocational district (serving more than one academic school district). About 1 percent of schools in the Common Core of Data files are vocational schools. (See Common Core of Data.)

Vocational/technical program

A postsecondary program, usually offered in a private for-profit or public institution and often completed in less than two years that generally leads to an occupational certificate or credential.

Many of these definitions are taken in part or in their entirety from:

Institute of Education Sciences' National Center for Education Sciences: http://nces.ed.gov/ programs/coe/glossary/index.asp>, or North Carolina Department of Public Instruction: http://www.ncpublicschools.org/nclb/glossary>.

Organizations

The following list of organizations and resources provides guidance about where policymakers, researchers and practitioners can obtain additional information about school dropout prevention policies, strategies and programs. The list is not comprehensive, and the authors of this report do not necessarily support the views presented in the organizations' materials.

Many of the following examples use descriptions taken directly from the organizations' own materials.

1. Alliance for Excellent Education

The Alliance for Excellent Education is a national policy and advocacy organization that focuses on dropout prevention. In an effort to provide more information about how high school students fare in a particular state, the Alliance for Excellent Education has created state reference cards for all 50 states and the District of Columbia that provide statistical snapshots of high schools in each state, including data on graduation rates, college readiness, academic achievement and teachers' salaries. Where applicable, statewide numbers are compared to the national average and include national rankings:

http://www.all4ed.org/about_the_crisis/schools/grad_rates_data

http://www.all4ed.org/about_the_crisis/schools/map>

2. America's Promise Alliance

The America's Promise Alliance is the nation's largest multisector collaborative dedicated to the well-being of children and youth. The Alliance partners with corporations, nonprofit service organizations, foundations, policymakers, advocacy organizations and faith groups that work collaboratively to ensure that America's young people receive the Five Promises:

http://www.americaspromise.org

One of the Alliance's main initiatives is dropout prevention. Information on dropout and graduation rates, dropout prevention and the Alliance's dropout prevention summits is available at:

http://www.americaspromise.org/APAPage.aspx?id=9172>

3. California Dropout Research Project (CDRP)

The California Dropout Research Project synthesizes existing research and undertakes new research to inform policymakers and the larger public about the nature of—and effective solutions to—the dropout problem in California. Drawing on the information produced by the CDRP, a policy committee composed of policymakers, researchers and educators presented an agenda for improving California's high school graduation rate in their report, "Solving California's Dropout Crisis."

The CDRP Web site has resources on dropout prevention, including research syntheses, original studies and policy briefs:

http://www.lmri.ucsb.edu/dropouts/pubs.htm

4. Center for Social Organization of Schools

The Center for Social Organization of Schools (CSOS) is an education research and development center at Johns Hopkins University. CSOS's goal is to provide the best data available on the size, scope, location and characteristics of the Graduation Gap, defined by CSOS as the difference between existing graduation rates and skill levels in the nation's high schools and the skill levels needed to meet the economic and social challenges of the 21st Century:

http://web.jhu.edu/CSOS/graduation-gap/gradgap.html

5. Communities In Schools

Communities In Schools (CIS) is the nation's largest dropout prevention organization. The CIS Web site includes information related to dropout

prevention, including an after-school program toolkit and information about programs that CIS considers success stories in dropout prevention:

https://www.cisnet.org

6. Education Commission of the States

The Education Commission of the States is the only nationwide interstate compact devoted to education. The ECS Web site is an extensive online resource for education policy:

http://www.ecs.org

The section of the site on dropout and graduation rates provides information on how states are calculating their high school graduation rates for the purposes of the No Child Left Behind Act and state accountability systems, the implications of applying different formulas for calculating these rates and the rates reported in the 50 states:

http://www.ecs.org/html/issue.asp?issueid=108&subissueID=163>

The At-Risk issue site and dropout sub-issue site provide information on who the dropout population is, their educational and economic prospects, dropout prevention programs and funding, "drop-in" programs for out-of-school youth and factors that reduce at-risk students' likelihood of dropping out:

http://www.ecs.org/html/issue.asp?issueid=13&subIssueID=74

http://www.ecs.org/html/issue.asp?issueid=13&subissueid=13&s

7. Futures for Kids (F4K)

Futures for Kids (F4K) is an online tool that allows students to explore and find careers that match their unique interests and abilities. The Web site features online mentoring, interactive career counseling, newsletters, skill and career matching support, links to a wide assortment of educational opportunities and search engines to help students and their families navigate the information. F4K is currently being implemented in several North Carolina school districts. In July 2005, F4K was awarded \$500,000 from the North Carolina General Assembly to expand F4K to additional districts:

http://www.f4k.org/">

8. Jobs for the Future (JFF)

Jobs for the Future is a nonprofit research, consulting and advocacy organization. Through its "Multiple Education Pathways Blue Print Initiative" and its "Double the Numbers 2007 Conference," JFF works to improve high school graduation rates, particularly in low-income and minority communities.

The JFF Web site also contains many publications and studies related specifically to dropout prevention and raising high school graduation rates:

http://www.jff.org/Knowledge_Center.
">http://www.jff.org/Knowledge_Center.
http://www.jff.org/Knowledge_Center.
<a href="http://www.jff.org/knowledge_Ce

9. Manhattan Institute

The Manhattan Institute conducts policy research on education reform at its Center for Civic Innovations. The section of their Web site listed below provides numerous publications on graduation rates, including topics such as public high school graduation rates by state, the relationship between graduation rates and high school exit exams, the relationship between residential school choice and graduation rates, and the gender gap between graduation rates for males and females:

http://www.manhattan-institute.org/tools/topical_index.php?topic=41

10. MDRC

MDRC is a nonprofit, nonpartisan education and social policy research organization dedicated to learning what works to improve programs and policies that affect the poor. The MDRC Web site contains resources regarding dropout prevention and high school graduation, including program evaluations:

http://www.mdrc.org/area_overview_1.html

http://www.mdrc.org/project_29_1.html

http://www.mdrc.org/publications/461/abstract.

11. The National Conference of State Legislatures

The National Conference of State Legislatures is a bipartisan organization that serves the legislators and staffs of the nation's 50 states, its commonwealths and territories. NCSL provides research, technical assistance and opportunities for policymakers to exchange ideas on the most pressing state issues. The NCSL Web site contains many resources on state-level education policies and best practices:

http://www.ncsl.org/programs/educ/K-12.htm

The following section of the NCSL Web site includes news, laws and legislation from across the nation on compulsory education requirements:

http://www.ncsl.org/programs/educ/CompulsoryEd.htm

The NCSL education bill tracking database tracks passed education legislation from 2000 to the present. It allows for specific term searches such as 'High School-Dropout Prevention,' 'High School-Graduation Rate Measurement' and 'High School-Graduation Requirements/Exit Exams':

http://www.ncsl.org/programs/educ/educ_leg.cfm

12. National Dropout Prevention Center/Network (NDPC/N)

NDPC/N provides knowledge and promotes networking for researchers, practitioners, policymakers and families to increase opportunities for youth in at-risk situations to receive the quality education and services necessary to successfully graduate from high school. The NDPC/N Web site offers many resources for dropout prevention, including information on model programs and effective strategies and a database of thousands of abstracted resources, including scholarly articles as well as program evaluations:

http://www.dropoutprevention.org/ndpcdefault.htm

13. National Governors' Association (NGA)

The National Governors' Association is a bipartisan organization of the nation's governors and works to promote visionary state leadership, to share best practices and to speak with a unified voice on national policy. Under the NGA's Center

for Best Practices' Graduation Counts project, all 50 governors committed to a uniform system of calculating high school graduation rates. The Graduation Counts Web site contains resources on implementing and reporting data under this project as well as updates on recent progress:

http://www.nga.org/portal/site/nga/menuitem.1f 41d49be2d3d33eacdcbeeb501010a0/?vgnextoid=8 f87739a87165110VgnVCM1000001a01010aRCR D>

14. RAND Corporation

The RAND Corporation is a nonprofit institution that helps improve policy- and decision-making through research and analysis. RAND's research in the area of kindergarten-through-12th grade education includes work on dropout prevention, assessment and accountability, school reform, teachers and teaching, higher education, military education and training, worker training, and substance-abuse prevention in schools. Through its Promising Practices Network (PPN), RAND provides policymakers, service providers and other decision makers with information on what approaches and programs have been shown in the scientific literature to improve outcomes in the areas of child health and education, including dropout prevention and graduation:

<http://www.promisingpractices.net/research_
topic.asp?topicid=7>

15. What Works Clearinghouse, U.S. Department of Education

The What Works Clearinghouse (WWC) was established by the U.S. Department of Education in 2002 to provide educators, policymakers, researchers and the public with a central and trusted source of scientific evidence of what works in education. The WWC is administered through a contract with Mathematica Policy Research Inc. WWC's Dropout Prevention reviews focus on secondary school and communitybased interventions designed to help students stay in school and/or complete school. These interventions can include services and activities such as incentives, counseling, monitoring, school restructuring, curriculum design, literacy support or community-based services to mitigate factors impeding progress in school:

http://ies.ed.gov/ncee/wwc/reports (click on "dropout prevention")

Publications

The following list of publications is a sampling of the literature that has been published on dropout prevention; it is not a comprehensive list. Following each citation is an abstract from the author or the Education Resources Information Center (ERIC).

1. Aloise-Young, P.A. & Chavez, E.L. (2002). Not all school dropouts are the same: Ethnic differences in the relation between reason for leaving school and adolescent substance drug use. *Psychology in the Schools*, 39, 539-547.

This study explores the relationship between students' reasons for dropping out and substance use in Mexican American and White adolescents. Results revealed that for Mexican American adolescents, substance use was highest among those who left school to be with their friends and lowest among those who left for family-related reasons. Among White adolescents, there were no significant differences.

2. Balfanz, R. (2007). What your community can do to end its drop-out crisis: Learnings from research and practice. Baltimore, MD: Center for Social Organization of Schools, Johns Hopkins University.

This publication is from the Summit on America's Silent Epidemic, a daylong event targeting the national high school dropout issue. The paper is based on more than a decade's worth of research at the Center for Social Organization of Schools at Johns Hopkins University. It is written as a practical guide with a three-step plan for addressing the dropout issue. The three essential steps to improving the dropout rate are as follows: (1) the community needs to understand its dropout rate and the resources it is devoting to improving it; (2) the community needs to develop a strategic dropout prevention, intervention, and recovery plan; and (3) the community needs to gather the human and financial resources necessary

for a comprehensive and sustained campaign and develop the evaluation, accountability and continuous improvement mechanisms necessary to maintain it.

3. Balfanz, R. & Legters, N. (2004). Locating the dropout crisis: Which high schools produce the nation's dropouts? Where are they located? Who attends them? Baltimore, MD: Center for Research on the Education of Students Placed At-Risk, U.S. Department of Education.

The purpose of this report was to locate the dropout crisis—to determine its scale and scope by identifying the number of high schools with severe dropout problems, detailing the states, cities, and locales where they are concentrated and establishing who attends them. For this analysis of high schools across the country, two cut-points were used to identify those that have high dropout and low graduation rates. The first cut-point is high schools in which there are 50 percent or fewer seniors than freshmen four years earlier. These high schools are classified as those with the worst promoting power in the U.S., because in these schools students have less than a 50/50 chance of graduating on time, if at all. The second cut-point used was high schools in which there are 60 percent or fewer seniors than freshmen. Identifying high schools with promoting power of 60 percent or less provides a good estimate of the number of high schools with severe dropout rates and thus can be used to locate the high schools that produce the majority of the nation's dropouts.

http://www.csos.jhu.edu/crespar/techReports/Report70.pdf

4. Blau, J.R., Bowen, G.L, & Van Dorn, R.A. (2006). The impact of community diversity and consolidated inequality on dropping out of high school. *Family Relations*, 55, 105-118.

Data from the National Education Longitudinal Study were combined with census data at the ZIP code level to examine the impact of neighborhood racial and ethnic diversity and consolidated inequality, in addition to individual, family, and school factors, on the likelihood of dropping out of high school. Results indicate that while the effects for diversity and consolidated inequality did not support the stated hypotheses, main effects for family risk and prior academic achievement were significant and in the stated direction. Also, when controlling for individual, family, school and neighborhood characteristics, African Americans were less likely than white students to drop out of school. Implications for contextual effects research and educational outcomes are discussed.

5. Braziel, P. & Kortering, L. (2008). Engaging youth in school and learning: The emerging key to school success and completion. *Psychology in the Schools*, 45, 461-465.

This commentary on articles in this special issue of Psychology in the Schools discusses the importance of school completion by identifying the individual and social costs associated with youths who fail to complete school. An appreciation of these various costs sets the stage for exploring an "emerging" key to school completion—engaging students in school and learning. A brief review of articles in this special issue directs attention toward various aspects of engagement, including conceptual insight and practical interventions.

 Bridgeland, J.M., DiIulio, J.J., & Burke Morison, K. (2006). The silent epidemic: Perspectives of high school dropouts. Washington, DC: Civic Enterprise, LLC.

The central message of this report is that while some students drop out because of significant academic challenges, most dropouts are students who could have, and who believe they could have, succeeded in school. This survey of young people who left high school without graduating suggests that, despite career aspirations that require education beyond high school and a majority

having grades of C or better, circumstances in students' lives and an inadequate response to those circumstances from the schools led to dropping out. While reasons vary, the general categories remain the same, whether in inner-city Los Angeles or suburban Nebraska.

http://www.gatesfoundation.org/nr/downloads/ed/TheSilentEpidemic-ExecSum.pdf

7. Bridgeland, J.M., DiIulio, J.J., & Streeter, R. (2007). Raising the compulsory school attendance age: The case for reform. Washington, DC: Civic Enterprise, LLC.

In recent years, more and more states have been passing or introducing legislation to raise the compulsory school age. Many states have recognized that the original laws were passed 100 years or more ago, when we had a very different economy. Today's globally competitive economy requires at least a high school diploma and often additional education and training to provide the knowledge and skills needed for the 21st century. Good research also supports the view that increasing the compulsory school age can help decrease the dropout rate in schools.

The authors have published this report to provide to state and local leaders more information about the merits of raising the compulsory school age—including the latest research, compelling arguments and examples of how other states are making progress—in order to strengthen the arsenal of tools states and communities have to combat the dropout epidemic.

8. Center for Mental Health Services in Schools at UCLA. (2007). *Dropout prevention*. Los Angeles, CA: UCLA.

This introductory packet provides basic references, internet resources, model programs, names from the Consultation Cadre and other resources related to dropout prevention.

http://smhp.psych.ucla.edu/pdfdocs/ DropoutPrev/dropout.pdf> 9. Dagenais, M., Montmarquette, C., & Viennot-Briot, N. (2007). Dropout, school performance, and working while in school. *The Review of Economics and Statistics*, 89, 752-760.

The authors develop an econometric model where the determinants of working while in school, academic performance, and the decision to drop out are set in the context of two types of high school students: those who prefer schooling and those who are more likely to join the labor market. The likelihood function of this model with heterogeneous preferences for schooling is composed of 48 individual contributions of a standard quadrivariate normal function. They also find that working fewer than 15 hours per week while in school is not necessarily detrimental to success in school. The results indicate that the decision to drop out is affected by the legal age to access the labor market, high minimum wages and low unemployment rates. Several policies that aim at reducing the number of high school dropouts are identified.

http://www.crest.fr/seminaires/lmi/montmarquette.pdf

10. Darling-Hammond, L. (2006). No Child Left Behind and high school reform. *Harvard Educational Review*, 76, 642-667.

Although No Child Left Behind (NCLB) aims to close the achievement gap that parallels race and class, some of its key provisions are at odds with reforms that are successfully overhauling the large, comprehensive high schools that traditionally have failed students of color and low-income students in urban areas. While small, restructured schools are improving graduation and college attendance rates, NCLB accountability provisions create counterincentives that encourage higher dropout and push-out rates for low-achieving students (especially English language learners), create obstacles to staffing that allow for greater personalization, and discourage performance assessments that cultivate higher-order thinking and performance abilities. In this article, Darling-Hammond proposes specific amendments to NCLB that could help achieve the goal of providing high-quality, equitable education for all

students by recruiting highly qualified teachers and defining such teachers in appropriate ways; by rethinking the accountability metrics for calculating adequate yearly progress so that schools have incentives to keep students in school rather than pushing them out; and by encouraging the use of performance assessments that can motivate ambitious intellectual work.

11. Englund, M.M., Egeland, B., & Collins, W.A. (2008). Exceptions to the high school dropout predictions in a low-income sample: Do adults make a difference? *Journal of Social Issues*, 64, 77-94

Adult-child relationship factors were examined to determine whether they differentiated between individuals who follow expected versus unexpected educational pathways. Low-income participants (96 men, 83 women) in the United States were followed from birth through age 23. Individuals were identified who followed expected versus unexpected pathways to high school graduation or dropping out based on academic achievement and behavioral problems. Patterns of parental involvement in school were significantly different between expected dropouts and unexpected graduates in middle childhood. In contrast, expected graduates had higher levels of parent involvement in middle childhood, more supportive parent-child relationships in early adolescence and higher levels of social competence with adults than did unexpected dropouts.

12. Entwisle, D.R., Alexander, K.L., & Olson, L.S. (2004). Temporary as compared to permanent high school dropout. *Social Forces*, 82, 1181-1205.

More and more high school dropouts are obtaining GEDs or returning to school to earn diplomas, and several studies point to socioeconomic status, academic standing, parenthood status and students' expectations as predictors of dropouts' later high school certification. Absent from these studies, however, are measures of students' motivational characteristics and employment patterns prior to dropping out. This article, which takes a life course perspective, draws upon a longitudinal study of first-time dropouts in Baltimore (where

the dropout rate is over 40 percent) to compare those who dropped out temporarily with those who dropped out permanently. We find that Baltimore students who later achieved high school degrees resembled their counterparts—those who finished high school—in national studies in terms of demographics and school performance. We also find that before dropping out, the temporary dropouts had more positive motivational qualities and were more often employed than the permanent dropouts. Policy implications of the findings are discussed, including the pivotal role of work and alternative routes to high school certification in the lives of disadvantaged adolescents.

 Gaviola, N. & Sable, J. (2007). Numbers and rates of public high school dropouts: School year 2004-05.
 Washington, DC: National Center for Education Statistics, U.S. Department of Education.

The Common Core of Data (CCD) is an annual universal collection of public elementary and secondary education data that is administered by the National Center for Education Statistics (NCES) and its data collection agent, the U.S. Census Bureau. Data for the CCD surveys are provided by state education agencies (SEAs). This report presents findings on the numbers and rates of public school students who dropped out of school in school years 2002–2003, 2003–2004, and 2004–2005, using data from the CCD State-Level Public-Use Data File on Public School Dropouts for these years. The report also used the Local Education Agency-Level Public-Use Data File on Public School Dropouts: School Year 2004-05 and the NCES Common Core of Data Local Education Agency Universe Survey Dropout and Completion Restricted-Use Data File: School Year 2004-05.

http://nces.ed.gov/pubs2008/2008305.pdf

14. Hao, L., Astone, N.M., & Cherlin, A.J. (2004). Adolescents' formal employment and school enrollment: Effects of state welfare policies. *Journal of Policy Analysis and Management*, 23, 697-721.

Variations in state welfare policies in the reform era may affect adolescents through two mechanisms: A competing labor market hypothesis posits that stringent state welfare policies may reduce adolescent employment; and a signaling hypothesis posits that stringent welfare policies may promote enrollment. To test these hypotheses, the authors use a dynamic joint model of adolescents' school enrollment and formal employment, separating state welfare policies from non-welfare state policies, state labor market conditions, and unobserved state characteristics. Longitudinal data from the NLSY97 on adolescents aged 14 to 18 and various state data sources over the period 1994-1999 support the competing labor market effect but not the signaling effect. In particular, lower-income dropouts suffer more severely from fewer labor market opportunities when state welfare policies are more stringent, which indicates that welfare reform may compromise work opportunities for lower-income dropouts.

15. Hunt, M.H., Meyers, J., Davies, G., Meyers, B., Grogg, K.R., & Neel, J. (2002). A comprehensive needs assessment to facilitate prevention of school drop out and violence. *Psychology in the Schools*, 39, 399-317.

This study addresses school violence and dropout and proposes that the underlying factor of school connectedness/school climate should guide preventive and intervention efforts. Principal components analysis revealed five distinct factors: school connectedness/positive school climate, causes of violence, causes of school dropout, interventions for drop out, and interventions for violence. The analysis was the basis for construction of a revised scale.

16. Jimerson, S.R., Anderson, G.E., & Whipple, A.D. (2002). Winning the battle and losing the war: Examining the relation between grade retention and dropping out of high school. *Psychology in the Schools*, 39, 441-457.

This study provides a comprehensive review of dropout research that examines grade retention within both associative and predictive models. A systematic review of 17 studies examining dropping out of high school prior to graduation demonstrates that grade retention is one of the most powerful predictors of dropout status. The discussion addresses the discrepancies among the perspectives of many educational professionals regarding the effectiveness of grade retention and deleterious long-term correlates. Education professionals, teachers, researchers, parents and policy makers considering the efficacy of grade retention are encouraged to consider the implications of these findings.

17. Jerald, C.D. (2006). *Identifying potential dropouts:* Key lessons for building an early warning data system. Washington, D.C.: Achieve Inc.

This white paper was prepared for Staying the Course: High Standards and Improved Graduation Rates, a joint project of Achieve Inc. and Jobs for the Future. Its goal is to provide policymakers with an overview of research about the dropout problem and the best strategies for building an early warning data system that can signal which students and schools are most in need of interventions. Specifically, this report summarizes the research on the factors that put students at greater risk of dropping out, the relative success of methods of predicting which students will drop out, and proposes a two-phase process for building an effective and efficient early warning data system. If policymakers heed the most current research, avoid the mistakes of the past, and invest sufficient up-front "research and development" dollars, they can build data systems to identify those students on the path to dropping out early enough to make a difference.

18. Kemple, J.J. & Snipes, J. (2004). Career academies: Impacts on labor market outcomes and educational attainment. New York: MDRC.

Career Academies offer high schools—particularly those in urban communities that struggle to keep students in school and to prepare them for post-secondary education and employment opportunities—a systematic approach to addressing a range of challenges. Typically serving between 150 and 200 students from grades nine or

10 through grade 12, Career Academies have three distinguishing features: (1) they are organized as small learning communities to create a more supportive, personalized learning environment; (2) they combine academic and career and technical curricula around a career theme to enrich teaching and learning; and (3) they establish partnerships with local employers to provide career awareness and work-based learning opportunities for students. There are estimated to be more than 2,500 Career Academies across the country, operating either as a single program or as multiple programs within a larger high school. Findings included: (1) The Career Academies substantially improved the labor market prospects of young men, a group that has experienced a severe decline in real earnings in recent years; (2) The Career Academies had no significant impacts (positive or negative) on the labor market outcomes for young women; (3) Overall, the Career Academies served as viable pathways to a range of post-secondary education opportunities, but they do not appear to have been more effective than options available to the non-Academy group; and (4) The positive labor market impacts were concentrated among Academy group members who were at high or medium risk of dropping out of high school when they entered the programs. The findings demonstrate the feasibility of improving labor market preparation and successful school-to-work transitions without compromising academic goals and preparation for college.

19. Kemple, J.J., Herlihy, C.M., & Smith, T.J. (2005). Making progress towards graduation: Evidence from the Talent Development High School model. New York: MDRC.

In low-performing public high schools in U.S. cities, high proportions of students drop out, students who stay in school typically do not succeed academically and efforts to make substantial reforms often meet with little success. The Talent Development High School model is a comprehensive school reform initiative that has been developed to address these challenges. Targeting some of the most troubled schools in the country, the model seeks to raise the expectations of teachers and students and to prepare all students for postsecondary education and

employment. MDRC, a nonpartisan, nonprofit education and social policy research organization, conducted an independent, third-party evaluation of Talent Development. This rigorous evaluation focuses on the first five high schools to begin using the model in the School District of Philadelphia. The evaluation follows 20 cohorts of ninth-grade students for up to four years of high school using a comparative interrupted time series research design.

20. Koball, H. (2007). Living arrangements and school dropout among minor mothers following welfare reform. *Social Science Quarterly*, 88, 1374-1391.

The 1996 welfare reform laws required that parents under the age of 18 live with their parents or an adult relative and enroll in school to be eligible for welfare benefits. This study examines whether minor mothers were less likely to drop out of school and more likely to live with parents following welfare reform.

 Leventhal, T. & Brooks-Gunn, J. (2004). A randomized study of neighborhood effects on low-income children's educational outcomes. *Developmental Psychology*, 40, 488-507.

Experimental data from the Moving to Opportunity for Fair Housing Demonstration were used to examine (a) if moving from high- to low-poverty neighborhoods (via randomization) was associated with low-income minority children's achievement, grade retention and suspensions/expulsions; (b) if moving minimized gender differences in these outcomes; and (c) potential mediators of observed program effects. Moving to low-poverty neighborhoods had positive effects on 11- to 18-year-old boys' achievement scores compared with those of their peers in high-poverty neighborhoods. These male adolescents' scores were comparable to females' scores, whereas male adolescents in high-poverty neighborhoods scored 10 points lower than female peers. Homework time and school safety partially accounted for program effects. From a policy perspective, the program benefited disadvantaged male adolescents at high risk for dropping out of school.

22. Martinez, C.R., DeGarmo, D.S., & Eddy, J.M. (2004). Promoting academic success among Latino youths. *Hispanic Journal of Behavioral Sciences*, 26, 128-151.

This article describes results from the Oregon Latino Youth Survey, which was designed to identify factors that promote or hinder academic success for Latino middle school and high school youngsters. The study samples included a total of 564 Latino and non-Latino students and parents. Analyses showed that Latino students reported a high frequency of discriminatory experiences and institutional barriers at school, and Latino students and their parents were more likely to experience institutional barriers compared to non-Latinos. Furthermore, Latino students and parents reported that they and/or their youngsters were more likely to drop out of school compared to non-Latinos. Path models showed that lower acculturation and more institutional barriers were related to less academic success for Latino students. More parent academic encouragement and staff extracurricular encouragement were associated with better academic outcomes for Latino students. Finally, family socioeconomic disadvantage had an indirect effect on Latino youngster academic success, through effects on parent monitoring and school involvement.

23. Monrad, M. (2007). *High school dropout: A quick stats fact sheet.* Washington, D.C.: National High School Center.

Each year almost one-third of public high school students fail to graduate from high school. The high school dropout problem is a crisis for the United States, in part because it impacts not only individuals and their education, but also because the economic and social costs are so dramatic. Globally, the United States ranks 17th in high school graduation rates and 14th in college graduation rates among developed nations. Domestically, the nation and its communities suffer from a lack of productive workers and higher costs associated with incarceration, health care and other social services. As the 21st-century United States moves towards an increasingly global economy, more individuals are discovering that higher levels of education are critical to their

own and their nation's ability to compete and thrive—in fact, about 90 percent of the fastest growing jobs will require some postsecondary education. Understanding the magnitude of the dropout problem and the forces that impact dropout rates is critically important to developing dropout prevention policies and programs.

24. National Commission on Excellence in Education. (1983). *A nation at risk: A report to the nation and the Secretary of Education*. Washington, D.C.: U.S. Department of Education.

A report published by the U.S. Department of Education in 1983 highlighting deficiencies in knowledge of the nation's students and population as a whole in areas such as literacy, mathematics, geography and basic science.

http://www.ed.gov/pubs/NatAtRisk/index.html

25. Ou, S.R. (2005). Pathways of long-term effects of an early intervention program on educational attainment: Findings from the Chicago Longitudinal Study. *Journal of Applied Developmental Psychology*, 26, 578-611.

This study investigated pathways that might explain the observed linkage between participation in early intervention programs and later educational attainment using a sample from the Chicago Longitudinal Study. The findings indicated that environmental factors, such as family and school, as well as personal characteristics that may be affected by the intervention, play important roles in predicting educational outcomes. The discussion focuses on how environmental factors, such as promoting family-school partnerships and attention to family influences in early intervention programs, might maintain and enhance the effects of early intervention so as to promote higher educational attainment much later in development.

26. Perreira, K.M., Harris, K.M., & Lee, D. (2006). Making it in America: High school completion by immigrant and native youth. *Demography*, 43, 511-536.

Using data from the National Longitudinal Study of Adolescent Health, the authors find that firstgeneration youth of Hispanic, Asian, and African heritage obtain more education than their parents, but the second generation and third or higher generations lose ground. Differences in dropout rates by race/ethnicity and immigrant generation are driven by differences in human, cultural and social capital. Low levels of family human capital, school social capital and community social capital place the children of immigrants at risk of dropping out. However, cultural capital and immigrant optimism buffer first-generation Hispanic youth and the children of Asian immigrants from the risk of dropping out of high school. While human and social capital resources improve with immigrant generation, cultural capital diminishes.

27. Quint, J. (2006). Meeting five critical challenges of high school reform: Lessons from research on three reform models. New York: MDRC.

High school reform has moved to the top of the education policy agenda, commanding the attention of the federal government, governors, urban school superintendents, philanthropists and the general public. All are alarmed by stubbornly high dropout rates, by the low academic achievement of many high school students and by the large numbers of high school graduates who are required to take remedial classes in college. These trends disproportionately affect urban and certain rural areas and minority groups: The most troubled high schools are concentrated in about 50 large cities and 15 primarily southern and southwestern states, and the majority of their students tend to be African American or Hispanic. This is the first in a series of reports for policymakers, practitioners and others who must make hard choices about how to change high schools. It discusses three comprehensive initiatives evaluated by MDRC —Career Academies, First Things First, and Talent Development—that have grappled with the challenges of improving low-performing urban and rural schools. Together, these three interventions are being implemented in more than 2,500 high schools across the country, and various components of these models are being used in

thousands more schools. The overall message of this synthesis is that "structural changes" to improve personalization and "instructional improvement" are the twin pillars of high school reform. Whether districts and schools adopt a comprehensive reform initiative like the ones MDRC studied or put together the elements of a comprehensive intervention on their own, much has been learned about what is needed—and what seems to work. What remains is to make sure that practitioners have the support they need to put that learning into practice.

28. Reynolds, A.J., Temple, J.A., Robertson, D.L., & Mann, E.A. (2001). Long-term effects of an early childhood intervention on educational achievement and juvenile arrest: A 15-year follow-up of low-income children in public schools. *Journal of the American Medical Association*, 285, 2339-2346.

Examined long-term effectiveness of the Chicago Child-Parent Center program on rates of high school completion and school dropout by age 20. Found that, compared to nonparticipants and adjusted for covariates, preschool participants had higher rates of high school completion, more years of education, and lower juvenile arrest and violent crime arrest rates. Effects were greater for boys than girls.

29. Rumberger, R.W. & Lamb, S.P. (2003). The early employment and further education experiences of high school dropouts: A comparative study of the United States and Australia. *Economics of Education Review*, 22, 353-366.

It is widely recognized that high school dropouts, or early school leavers, often experience difficulty in making the transition from school to productive activities in adulthood, particularly post-school education, training and employment. This study examines the experiences of high school dropouts from the United States and Australia in the first two years beyond high school. Unlike most studies of school dropouts, the authors define a school dropout as any student who ever quit high school. By defining school dropouts in this way,

they are able to examine not only which students quit high school, but which ones ultimately return and complete high school by earning a regular high school diploma or a high school equivalency. In the United States, at least, a high proportion of high school dropouts ultimately complete secondary school. The authors go on to compare the post-school education, training and employment experiences of school dropouts who complete high school with those who do not complete high school as well as with high school graduates who never quit school. Their analysis reveals substantial differences in the post-school education and employment experiences of these groups, with school dropouts experiencing much longer periods where they are neither employed nor in post-school education or training.

30. Rumberger, R.W. & Thomas, S.L. (2000). The distribution of dropout and turnover rates among urban and suburban high schools. *Sociology of Education*, 73, 39-67.

Although school dropout remains an important policy issue and has generated considerable research, little of this research has examined dropout as a measure of school performance. Even less attention has been paid to student turnover, another related measure of how well schools are keeping students enrolled. This study examined the distributions of both dropout and turnover rates among a large sample of U.S. high schools and tested a series of models to explain these differences, using data from the NELS High School Effectiveness Study and nonlinear multilevel modeling. The results revealed substantial variability in school dropout and turnover rates among the high schools. Moreover, consistent with other work in this area, much of the variation in school dropout and turnover rates could be attributed to differences in the background characteristics of the students. Yet student composition, school resources and school processes—factors that policymakers and educators control-also influenced dropout and turnover rates.

31. Scanlon, D. & Mellard, D.F. (2002). Academic and participation profiles of school-age dropouts with and without disabilities. *Exceptional Children*, 68, 239-259.

Young adults (N=277) with and without learning disabilities or emotional or behavioral disorders were interviewed regarding their school and post-drop out experiences. Findings indicate that factors such as disability status, when individuals drop out, and self-perspectives influence education participation. Strategies for helping students who drop out are discussed.

32. Smith, T.M. (2003). Who values the GED? An examination of the paradox underlying the demand for the General Educational Development credential. *Teachers College Record*, 105, 375-415.

Examines the paradox of strong individual demand and strong institutional support for the General Educational Development (GED) credential despite educational and economic returns markedly lower than those of traditional high school graduates, suggesting that the GED program is a low-cost way to integrate thousands of off-track individuals back into the mainstream, while providing an efficient means for the educational system to meet dropout reduction goals.

Stallings, T. (2007). Missing persons:
 Understanding and addressing high school dropouts in North Carolina. North Carolina Insight, 22.

This report by the North Carolina Center for Public Policy Research analyzes different formulas for calculating dropout and graduation rates, assesses who drops out and why, and reviews different programs designed to address the dropout challenge. The report concludes with six recommendations for North Carolina policymakers to consider as they address this problem: (1) The state should expand its effort to provide the true picture of the dropout problem by reporting multiple high school completion

totals and rates annually in addition to the current dropout event rate, with coherent explanations of each; (2) The N.C. Department of Public Instruction should improve its data collection system to enhance the way local school systems, schools, social workers and guidance counselors report reasons for students dropping out of school; (3) The N.C. General Assembly's Joint Legislative Education Oversight Committee should study the impact of raising the compulsory school attendance age to 18 and as part of a policy of encouraging as many students as possible to complete high school; (4) The N.C. Department of Public Instruction should consider revising and updating its school curricula by adding more real-world elements such as service learning, internships and career exploration with an eye toward increasing relevance and increasing the number of students who stay in school; (5) The N.C. General Assembly should require the N.C. Department of Public Instruction to formally evaluate all existing dropout prevention programs and policies and appropriate funds for this evaluation; and (6) Once the N.C. Department of Public Instruction completes its research, it should require each local school system to develop a dropout prevention plan that addresses the unique needs of its school population and incorporates resources already available in the community.

34. Stearns, E. & Glennie, E.J. (2006). When and why dropouts leave high school. *Youth & Society*, 38, 29-57.

Teens may leave school because of academic failure, disciplinary problems or employment opportunities. In this article, the authors test whether the reasons dropouts leave school differ by grade level and age. The authors compare dropout rates and reasons across grade levels and ages for all high school students, ethnic groups and gender groups. Across all students, ninth graders have the highest dropout rate: This pattern persists for Blacks, Latinos and Native Americans, and for male students. Dropout reasons vary by age, grade, ethnicity and gender as well. Ninth graders and students aged 16 and younger are more likely than advanced and older students to leave school for disciplinary reasons. Older male students are more likely than younger males to leave school for

employment. The significant variation in dropout rates and reasons by grade level and age indicates that multiple dropout processes may influence teens to leave school.

35. Swanson, C.B. (2008). Cities in Crisis: A special analytic report on high school graduation. Bethesda, MD: Editorial Projects in Education Research Center.

This study explored the implications of demographic trends on the quality of the future labor force and on public social expenditures. It also focused on the educational costs and social benefits of educational and immigration policy alternatives designed to close the gap in educational attainment between non-Hispanic whites and Hispanics and blacks. The RAND Education Simulation Model examines U.S. population flows through the primary, secondary, and postsecondary education systems, dividing the nation into two regions—California and the rest of the nation—with California chosen for the study because it has the largest immigrant and minority populations. The model estimates that in spite of the rapid growth in the percentage of minorities in the nation's population, the educational attainment of the adult population (age 25 and over) will be higher in 2015 than it was in 1990. However, unless further gains are made in the educational attainment of minorities, their share of college-educated entrants into the labor force will decrease. In addition, the educational gap between Asians and non-Hispanic whites vis-à-vis blacks and Hispanics will increase, especially in California. The results suggest that closing this educational gap would pay for itself, particularly in California.

http://www.americaspromise.org/uploadedFiles/ AmericasPromiseAlliance/Dropout_Crisis/ SWANSONCitiesInCrisis040108.pdf>

36. Vernez, G., Krop, R.A., & Rydell, C.P. (1999). Closing the education gap: Benefits and costs. Santa Monica, CA: Rand.

This study had two purposes: (1) to promote a better understanding of what these changes in

the population's ethnic composition mean for the nation's education of the labor force and for educational institutions and (2) to explore the benefits and costs associated with closing the gap in educational attainment, fully or partially, between ethnic groups. The costs of closing the gap would seemingly be high, but the public and societal benefits of doing so would be even higher

This study is the first to estimate the implications for postsecondary educational institutions of closing the educational attainment gap. A significant byproduct of this study is the simulation model that was developed, which states across the nation can use to assess the implications of closing the education gap for their educational institutions and for spending on social and health programs.

http://www.rand.org/pubs/monograph_reports/2007/MR1036.pdf

37. What Works Clearinghouse. (2007). *Dropout* prevention. Washington, DC: U.S. Department of Education.

The Department of Education's Institute of Education Sciences' What Works Clearinghouse (WWC) provides educators, policymakers, researchers and the public with scientific evidence of what works in education. Mathematica administers the WWC.

The review focused on three outcome domains: staying in school, progressing in school and completing school. WWC looked at 59 studies of 16 dropout prevention programs that qualified for review. Of these, 16 studies of 11 programs met WWC evidence standards—seven without reservations and nine with reservations. The five other programs did not have studies that met WWC evidence screens.

http://ies.ed.gov/ncee/wwc/pdf/DO_TR_07_30_07.pdf

Compulsory School Attendance Laws, by State

This table provides the compulsory attendance ages for all 50 states, as well as information on states that have raised or are considering raising the compulsory attendance age. The table is comprehensive to the extent possible based on available information at this writing.

State	Compul Attenda Age from	ance	Exemptions ¹ /Other Info	Recent Legislation
AL	7	16	legally and regularly employed under child labor law	
	3	21	(for special ed students)	
AK	7	16		Senate Bill 14 (2007)
AZ	6	16	14 with parental consent and gainful employment	
AR	5	17	(student must complete school year after turning 17)	
CA	6	18		
СО	7	16	has current age and school certificate or work permit	
СТ	5	18	16 with parental consent	
DE	5	16		
DC	5	18		
FL	6	17	16 with parental consent	Senate Bill 360 (2007)
GA	6	16		
HI	6	18	15 if employed	
ID	7	16		
IL	7	17	employed and excused by school official	
IN	7	18	16 with consent of parent and principal	
			14 if parent agrees and State Labor bureau issues a certificate	
IA	6	16		House Study Bill 13 (2007)
KS	7	18	16 or 17 with parental consent	
KY	6	16		House Bill 221 (2007)
LA	7	18	17 with parental consent	
MD	5	16		
MA	6	16	14 and completion of the 6th grade and employment permit	House Bill 394 (2007)
MI	6	16		Senate Bill 0011 (2007)
MN	7	16		
MS	6	17	(from 5 years of age if in public kindergarten)	
МО	7	16	14 and gainful employment	

State	Atten	oulsory idance ges to	Exemptions ¹ /Other Info	Recent Legislation
MT	7	16	(or completion of 8th grade, whichever is later)	
NE	7	18	14 if excused by board of trustees or if work is necessary for own or parents' support	
			16 with parental consent	
NV	7	17	14 if excused by board of trustees or if work is necessary for own or parents' support	Assembly Bill 212 (2007)
NH	6	16		Senate Bill 0018 (2007)
NJ	6	16		Assembly Bill 1801 (2006)
NM	5 F	H.S. grad	17 if excused by school board and gainfully employed	Senate Bill 561 (2007)
			17 if child is in alternative schooling with parental consent	
NY	6	17	(in cities with 4,500 population or more and union-free school district)	
		16	(if does not meet above criteria and approved by local school board)	
NC	7	16		
ND	7	16	if necessary to support family	Senate Bill 2184 (2007)
ОН	6	18	16 with consent of parent and superintendent	
OK	5	18	16 if excused by written joint agreement	
			16 with consent of parent and school administration	
OR	7	18	21 for a child with a disability	
PA	8	17	16 if regularly engaged in employment with a certificate	
			15 if employed in farm work or domestic service in private home with permit	
			14 if employed as above and completed elementary school with permit	
RI	6	18	16 with written parental consent	
SC	5	17	16 if further attendance is determined by court to be disruptive or unproductive	
			completion of the 8th grade and employment necessary for maintenance of home	
SD	6	16	completion of the 8th grade if member of certain religious organizations	Senate Bill 199 (2007)
TN	6	18	local exemptions at 17 for discipline problems	
TX	6	18		
UT	6	18	16 and 8th grade completed	
VT	6	16	15 and completed 6th grade and services needed for support of family	
VA	5	18	any pupil exempt with consent of parent and superintendent, principal or court	
WA	8	18		
WV	6	16		House Bill 2088 (2007)
WI	6	18		
WY	7	16		House Bill 0129 (2007)

Source: U.S. Department of Labor (2006) as cited in Bridgeland, J.M., DiIulio, J.J., & Streeter, R. (2007). *Raising the compulsory school attendance age: The case for reform.* Washington, DC: Civic Enterprise, LLC. (See publications for summary of article.)

¹ Nearly all states exempt those whose physical or mental condition precludes attendance. Other exemptions not directly related to employment include those because of distance from school or school transportation; expulsion, suspension or determined to be disruptive; marriage; excused by court or judge; and receiving religious education.

For more information on recent state legislation:

Alaska Senate Bill 114. http://aksenate.org/index.php?bill=SB14>.

Florida Senate Bill 360. http://www.flsenate.gov/data/session/2007/Senate/bills/billtext/pdf/s0360.pdf.

Iowa House Study Bill 13. http://coolice.legis.state.ia.us/Cool-ICE/default.asp?Category=billinfo&Service=Billbook&menu=true&ga=82&hbill=HSB13>.

Kentucky House Bill 221. http://www.lrc.ky.gov/record/07rs/HB221.htm.

Massachusetts House Bill 394. http://www.mass.gov/legis/bills/house/185/ht00pdf/ht00394.pdf>.

Michigan Senate Bill 0011. http://legislature.mi.gov/doc.aspx?2007-sb-0011.

Nevada Assembly Bill 212. http://search.leg.state.nv.us/74th/Bills/AB/AB212.PDF#xml=http://search.leg.state.nv.us/isysquery/irl80cb/1/hilite.

New Hampshire Senate Bill 0018. http://www.gencourt.state.nh.us/legislation/2007/SB0018.html>.

New Jersey Assembly Bill 1801. http://www.njleg.state.nj.us/2006/Bills/A2000/1801_I1.HTM>.

New Mexico Senate Bill 561. h&year=07.

North Dakota Senate Bill 2184. http://www.legis.nd.gov/assembly/60-2007/bill-index/bi2184.html>.

South Dakota Senate Bill 199. http://legis.state.sd.us/sessions/2007/199.htm>.

West Virginia House Bill 2088. http://www.legis.state.wv.us/Bill_Text_HTML/2007_SESSIONS/RS/BILLS/hb2088%20intr.htm>.

Wyoming House Bill 0129. http://legisweb.state.wy.us/2007/Introduced/HB0129.pdf>.

North Carolina Dropout Event Rates, by LEA

2006-2007 Dropout Event Data for Grades Nine through 12 in North Carolina Public Schools¹ (Excluding Charter Schools and Expulsions)

LEA#	School System or Charter School	2006-2007 Dropout Rate
010	Alamance-Burlington	6.00
020	Alexander County	5.74
030	Alleghany County	3.09
040	Anson County	4.53
050	Ashe County	6.13
060	Avery County	3.61
070	Beaufort County	6.16
080	Bertie County	2.41
090	Bladen County	8.12
100	Brunswick County	5.66
110	Buncombe County	5.38
111	Asheville City	4.63
120	Burke County	5.73
130	Cabarrus County	4.77
132	Kannapolis City	6.77
140	Caldwell County	5.35
150	Camden County	2.61
160	Carteret County Public	4.93
170	Caswell County	7.89
180	Catawba County	4.15
181	Hickory City	8.02
182	Newton Conover City	3.25
190	Chatham County	4.64
200	Cherokee County	4.57
210	Edenton/Chowan	4.56
220	Clay County	2.55
230	Cleveland County	6.31
240	Columbus County	4.64
241	Whiteville City	2.83
250	Craven County	5.10
260	Cumberland County	3.56
270	Currituck County	4.04
280	Dare County	2.07

LEA#	School System or Charter School	2006-2007 Dropout Rate
290	Davidson County	5.85
291	Lexington City	5.52
292	Thomasville City	6.98
300	Davie County	4.76
310	Duplin County	5.81
320	Durham Public	4.90
330	Edgecombe County	6.23
340	Forsyth County	6.43
350	Franklin County	6.13
360	Gaston County	6.29
370	Gates County	6.64
380	Graham County	8.16
390	Granville County	4.70
400	Greene County	5.29
410	Guilford County	2.99
420	Halifax County	6.73
421	Roanoke Rapids City	7.28
422	Weldon City	5.33
430	Harnett County	6.53
440	Haywood County	6.05
450	Henderson County	4.01
460	Hertford County	3.14
470	Hoke County	7.65
480	Hyde County	5.19
490	Iredell-Statesville	4.52
491	Mooresville City	4.96
500	Jackson County	6.90
510	Johnston County	5.39
520	Jones County	5.62
530	Lee County	5.83
540	Lenoir County Public	5.74
550	Lincoln County	4.79
560	Macon County	6.61
570	Madison County	6.04
580	Martin County	6.17
590	McDowell County	7.10
600	Charlotte-Mecklenburg	6.39
610	Mitchell County	5.93
620	Montgomery County	5.40
630	Moore County	4.29
640	Nash-Rocky Mount	6.45
650	New Hanover County	5.92
660	Northampton County	8.68

LEA#	School System or Charter School	2006-2007 Dropout Rate
670	Onslow County	4.53
680	Orange County	4.28
681	Chapel Hill-Carrboro	1.12
690	Pamlico County	4.00
700	Elizabeth City/Pasquotank County	5.19
710	Pender County	4.81
720	Perquimans County	5.23
730	Person County	5.29
740	Pitt County	6.89
750	Polk County	3.45
760	Randolph County	6.41
761	Asheboro City	5.18
770	Richmond County	7.22
780	Robeson County	6.46
790	Rockingham County	6.01
800	Rowan-Salisbury	5.47
810	Rutherford County	7.26
820	Sampson County	6.04
821	Clinton City	7.57
830	Scotland County	4.62
840	Stanly County	5.45
850	Stokes County	4.97
860	Surry County	6.54
861	Elkin City	2.75
862	Mount Airy City	2.89
870	Swain County	8.25
880	Transylvania County	4.76
890	Tyrrell County	4.50
900	Union County Public	3.15
910	Vance County	6.70
920	Wake County	4.21
930	Warren County	5.88
940	Washington County	1.99
950	Watauga County	4.39
960	Wayne County Public	4.16
970	Wilkes County	6.12
980	Wilson County	7.98
990	Yadkin County	3.94
995	Yancey County	4.55

¹ Report to the Joint Legislative Education Oversight Committee: 2006-2007 Annual report on dropout events and rates, G.S. 115C-12(27), prepared by the North Carolina Department of Public Instruction.

< http://www.ncpublicschools.org/docs/research/dropout/reports/200607 dropout.pdf>.

NCFIS Overview and History

The North Carolina Family Impact Seminar (NCFIS) is part of the Policy Institute for Family Impact Seminars network. The Institute was founded in 1999 at the University of Wisconsin-Madison/Extension and continues the family impact mission of the federal Family Impact Seminar, which operated from 1976 to 1998 in Washington, D.C.

Since the start of state-level Family Impact Seminars in 1998, more than 20 states across the country have joined the network and have convened Family Impact Seminars on a wide range of policy issues that impact children and families.

Duke University's Center for Child and Family Policy directs the NCFIS. The Center became the home site for NCFIS in 2004 and directed the first FIS in the state in 2005.

For more information on the Policy Institute for Family Impact Seminars: www. familyimpactseminars.org.

For more information on NCFIS: www.childandfamilypolicy.duke. edu/familyimpact/.

North Carolina Family Impact Seminars:

2005: Medicaid Cost Containment Strategies in North Carolina and Other States http://www.childandfamilypolicy.duke.edu/familyimpact/2005.html

2006: Children's Mental Health:

Strategies for providing high quality and cost-effective care

http://www.childandfamilypolicy.duke.edu/familyimpact/2006.html

2007: Juvenile or Adult?

Adolescent offenders and the line between the juvenile and criminal justice systems

http://www.childandfamilypolicy.duke.edu/familyimpact/2007.html

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Jenni Owen, MPA

Director of Policy Initiatives and Associate Director, Center for Child and Family Policy

Duke University

Dropout Prevention: Strategies for improving high school graduation rates

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Editors:

Jenni Owen, Director of Policy Initiatives and Associate Director
Joel Rosch, Senior Research Scholar and Policy Liaison
Clara Muschkin, Research Scientist and Director, North Carolina Education Research Data Center
Jana Alexander, Director of Communications
Casey Wyant, Research Assistant, 2008 Family Impact Seminar

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Box 90545 Durham, NC 27708-0545 (919) 613-9303 www.childandfamilypolicy.duke.edu